EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	2158	podophyllotoxin	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 14:07
S2	205	podophyllotoxin.ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/06 13:57
S3	6	"576201".ap.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/06 14:03
S4	8	("3634459"|"5536847"|"5541223"). PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/06 14:03
S5	2	"6903133".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 13:37
S6	0	podophyllotoxin and pyrrol-2, 4-dione	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 14:07
S7	0	podophyllotoxin and pyrrol-2, 5-dione	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 14:07

EAST Search History

S8	16	podophyllotoxin and pyrrol same dione	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 14:34
S9	4	"6903131"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 14:34
S10	4	"6903131".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 14:39
S11	15254	maleimide.ab. prodrug.ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 14:40
S12	1	maleimide.ab. and prodrug.ab. and cancer.ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 14:41
S13	77	maleimide.ab. and cancer.ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 15:05
S14	0	maleimide.ab. and cancer.ab. same linker	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 15:05

EAST Search History

S15	18	maleimide near linker and cancer. ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 15:18
S16	1684	maleimide same linker	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 15:18
S17	1086	maleimide same linker and cancer	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 15:19
S18	108	maleimide same linker and cancer. ab.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 15:19
S19	6	"576201".ap.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 15:27
S20	7	"108979".ap.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2007/06/19 15:27

```
Connecting via Winsock to STN



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PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR 7):2


* * * * * * * * * *  Welcome to STN International  * * * * * * * * * *

 NEWS  1          Web Page for STN Seminar Schedule - N. America
 NEWS  2  JAN 08  CHEMLIST enhanced with New Zealand Inventory of Chemicals
 NEWS  3  JAN 16  CA/CAplus Company Name Thesaurus enhanced and reloaded
 NEWS  4  JAN 16  IPC version 2007.01 thesaurus available on STN
 NEWS  5  JAN 16  WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
 NEWS  6  JAN 22  CA/CAplus updated with revised CAS roles
 NEWS  7  JAN 22  CA/CAplus enhanced with patent applications from India
 NEWS  8  JAN 29  PHAR reloaded with new search and display fields
 NEWS  9  JAN 29  CAS Registry Number crossover limit increased to 300,000 in
                  multiple databases
 NEWS 10  FEB 15  PATDPASPC enhanced with Drug Approval numbers
 NEWS 11  FEB 15  RUSSIAPAT enhanced with pre-1994 records
 NEWS 12  FEB 23  KOREAPAT enhanced with IPC 8 features and functionality
 NEWS 13  FEB 26  MEDLINE reloaded with enhancements
 NEWS 14  FEB 26  EMBASE enhanced with Clinical Trial Number field
 NEWS 15  FEB 26  TOXCENTER enhanced with reloaded MEDLINE
 NEWS 16  FEB 26  IFICDB/IFIPAT/IFIUDB reloaded with enhancements
 NEWS 17  FEB 26  CAS Registry Number crossover limit increased from 10,000
                  to 300,000 in multiple databases
 NEWS 18  MAR 15  WPIDS/WPIX enhanced with new FRAGHITSTR display format
 NEWS 19  MAR 16  CASREACT coverage extended
 NEWS 20  MAR 20  MARPAT now updated daily
 NEWS 21  MAR 22  LWPI reloaded
 NEWS 22  MAR 30  RDISCLOSURE reloaded with enhancements
 NEWS 23  APR 02  JICST-EPLUS removed from database clusters and STN
 NEWS 24  APR 30  GENBANK reloaded and enhanced with Genome Project ID field
 NEWS 25  APR 30  CHEMCATS enhanced with 1.2 million new records
 NEWS 26  APR 30  CA/CAplus enhanced with 1870-1889 U.S. patent records
 NEWS 27  APR 30  INPADOC replaced by INPADOCDB on STN
 NEWS 28  MAY 01  New CAS web site launched
 NEWS 29  MAY 08  CA/CAplus Indian patent publication number format defined
 NEWS 30  MAY 14  RDISCLOSURE on STN Easy enhanced with new search and display
                  fields
 NEWS 31  MAY 21  BIOSIS reloaded and enhanced with archival data
 NEWS 32  MAY 21  TOXCENTER enhanced with BIOSIS reload
 NEWS 33  MAY 21  CA/CAplus enhanced with additional kind codes for German
                  patents
 NEWS 34  MAY 22  CA/CAplus enhanced with IPC reclassification in Japanese
                  patents

 NEWS EXPRESS  NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS LOGIN    Welcome Banner and News Items
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 NEWS IPC8     For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
specific topic.

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FILE 'HOME' ENTERED AT 11:43:58 ON 06 JUN 2007

=> file reg
COST IN U.S. DOLLARS                                 SINCE FILE      TOTAL
                                                        ENTRY     SESSION
FULL ESTIMATED COST                                      0.21        0.21

FILE 'REGISTRY' ENTERED AT 11:44:22 ON 06 JUN 2007
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DICTIONARY FILE UPDATES:   5 JUN 2007  HIGHEST RN 936615-27-9

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TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

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=>
Uploading C:\Program Files\Stnexp\Queries\10.576201\form 2.str
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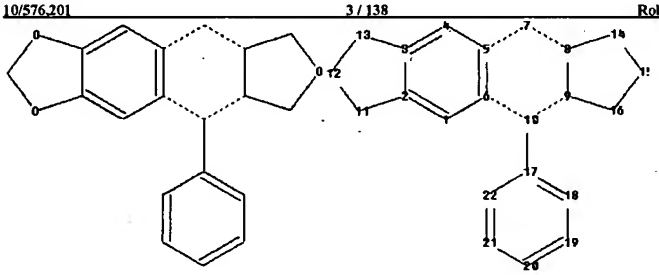

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ring nodes :
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10-17
ring bonds :
1-2  1-6  2-3  2-11  3-4  3-13  4-5  5-6  5-7  6-10  7-8  8-9  8-14  9-10  9-16
11-12  12-13  14-15  15-16  17-18  17-22  18-19  19-20  20-21  21-22
exact/norm bonds :
2-11  3-13  5-7  6-10  7-8  8-9  8-14  9-10  9-16  11-12  12-13  14-15  15-16
exact bonds :
10-17
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6  17-18  17-22  18-19  19-20  20-21  21-22

Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:Atom  8:Atom  9:Atom  10:Atom
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22:Atom


L1      STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1              STR
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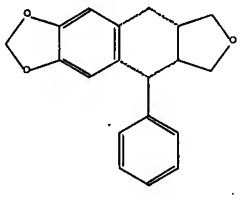


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Structure attributes must be viewed using STN Express query preparation.


=> s l1 sss sam
SAMPLE SEARCH INITIATED 11:44:46 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     1309 TO ITERATE

100.0% PROCESSED     1309 ITERATIONS                          50 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        24010 TO     28350
PROJECTED ANSWERS:            2991 TO      4649

L2            50 SEA SSS SAM L1

=> d scan

L2   50 ANSWERS   REGISTRY  COPYRIGHT 2007 ACS on STN
IN   Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 8a-bromo-5,8,8a,9-
     tetrahydro-9-(2-propenyloxy)-5-(3,4,5-trimethoxyphenyl)-, (5R,5aR,8aS,9R)-
     (9CI)
MF   C25 H25 Br O8

Absolute stereochemistry.  Rotation (-).
```
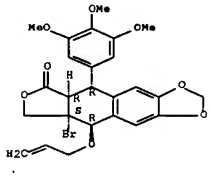
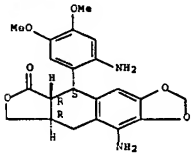



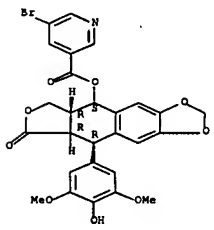
```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L2   50 ANSWERS   REGISTRY  COPYRIGHT 2007 ACS on STN
IN   INDEX NAME NOT YET ASSIGNED
MF   C21 H22 N2 O6

Absolute stereochemistry.
```



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 3-Pyridinecarboxylic acid, 5-bromo-, (5S,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C27 H22 Br N O9

Absolute stereochemistry. Rotation (-).



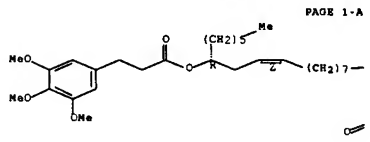
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

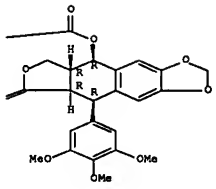
L2 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Benzenepropanoic acid, 3,4,5-trimethoxy-, (1R,3Z)-12-[[(5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]oxy]-1-hexyl-12-oxo-3-dodecenyl ester (9CI)
MF C52 H68 O14

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B

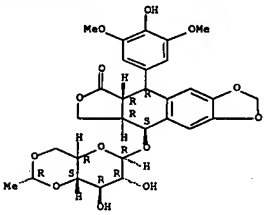


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Acetamide, N-[(7S)-5,6,7,9-tetrahydro-1,2,3-trimethoxy-10-(methylthio)-9-oxobenzo[a]heptalen-7-yl]-, mixt. with (5R,5aR,8aR,9S)-9-[[4,6-O-(1R)-ethylidene-β-D-glucopyranosyl]oxy]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one (9CI)
MF C29 H32 O13 . C22 H25 N O5 S
CI MXS

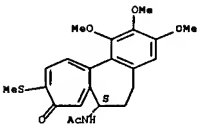
CM 1

Absolute stereochemistry. Rotation (-).



CM 2

Absolute stereochemistry.

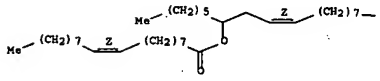


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

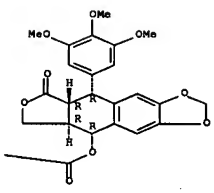
L2 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 9-Octadecenoic acid, 12-[[(9Z)-1-oxo-9-octadecenyl]oxy]-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester, (9Z)- (9CI)
MF C58 H86 O11

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



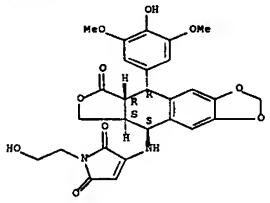
PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-(2-hydroxyethyl)- (9CI)
MF C27 H26 N2 O10

Absolute stereochemistry.

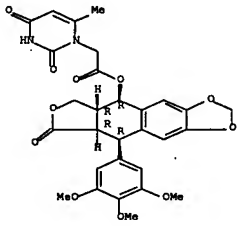


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L2 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1(2H)-Pyrimidineacetic acid, 3,4-dihydro-6-methyl-2,4-dioxo-, (5R,5aR,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl ester (9CI)
MF C29 H28 N2 O11

Absolute stereochemistry.

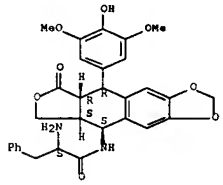


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L2 50 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Benzenepropanamide, α-amino-N-[5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]-, [5S-[5α(R*),5aβ,8aα,9β]]- (9CI)
MF C30 H30 N2 O8

CI COM

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

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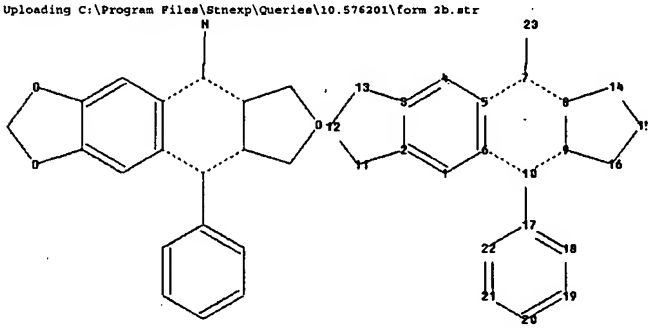
Uploading C:\Program Files\Stnexp\Queries\10.576201\form 2b.str



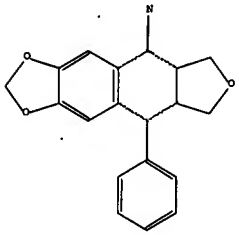
chain nodes :
23
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
chain bonds :
7-23 10-17
ring bonds :
1-2 1-6 2-3 2-11 3-4 3-13 4-5 5-6 5-7 6-10 7-8 8-9 8-14 9-10 9-16 11-12 12-13 14-15 15-16 17-18 17-22 18-19 19-20 20-21 21-22
exact/norm bonds :
2-11 3-13 5-7 6-10 7-8 7-23 8-9 8-14 9-10 9-16 11-12 12-13 14-15 15-16

exact bonds :
10-17
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 17-18 17-22 18-19 19-20 20-21 21-22

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:CLASS

L3 STRUCTURE UPLOADED

=> d
L3 HAS NO ANSWERS
L3 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l3 sss sam
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SAMPLE SCREEN SEARCH COMPLETED - 98 TO ITERATE

100.0% PROCESSED 98 ITERATIONS 44 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1367 TO 2553
PROJECTED ANSWERS: 483 TO 1277

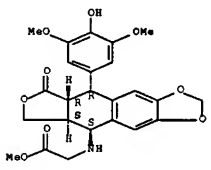
L4 44 SEA SSS SAM L3

=> d scan

L4 44 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN

IN Glycine, N-[5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]-, methyl ester, [5S-(5α,5aβ,8aα,9β)]- (9CI)
MF C24 H25 N O9

Absolute stereochemistry.

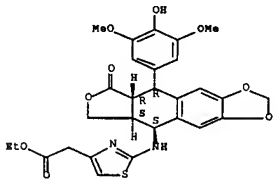


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L4 44 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4-Thiazoleacetic acid, 2-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester (9CI)
MF C28 H28 N2 O9 S

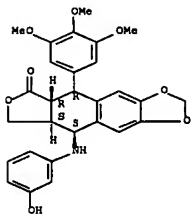
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 44 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-9-[(3-hydroxyphenyl)amino]-5-(3,4,5-trimethoxyphenyl)-, (5R,5aR,8aS,9S)-(9CI)
MF C28 H27 N O8

Absolute stereochemistry.

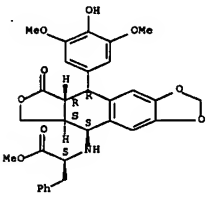


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L4 44 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN L-Phenylalanine, N-[5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]-, methyl ester, [5S-(5α,5aβ,8aα,9β)]- (9CI)
MF C31 H31 N O9

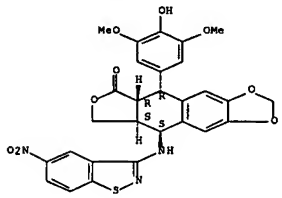
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L4 44 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[(5-nitro-1,2-benzisothiazol-3-yl)amino]-, (5R,5aR,8aS,9S)- (9CI)
MF C28 H23 N3 O9 S

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file hcaplus
COST IN U.S. DOLLARS SINCE FILE ENTRY 1.80 TOTAL SESSION 2.01
FULL ESTIMATED COST

FILE 'HCAPLUS' ENTERED AT 11:46:58 ON 06 JUN 2007
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 6 Jun 2007 VOL 146 ISS 24
FILE LAST UPDATED: 5 Jun 2007 (20070605/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l4
L5 38 L4

=> file reg
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION

FULL ESTIMATED COST 2.60 4.61

FILE 'REGISTRY' ENTERED AT 11:47:45 ON 06 JUN 2007
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 5 JUN 2007 HIGHEST RN 936615-27-9
DICTIONARY FILE UPDATES: 5 JUN 2007 HIGHEST RN 936615-27-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

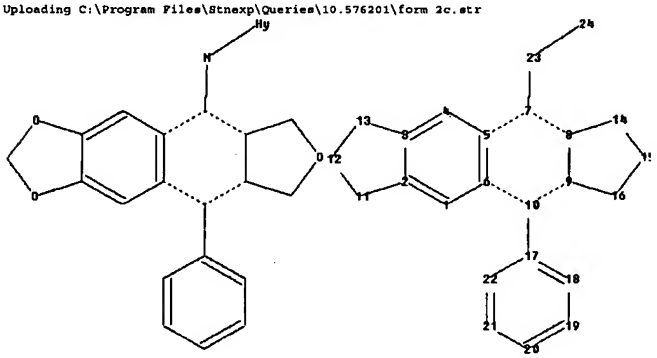
TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10.576201\form 2c.str



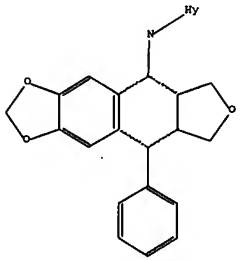
chain nodes :
23 24
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
chain bonds :
7-23 10-17 23-24
ring bonds :
1-2 1-6 2-3 2-11 3-4 3-13 4-5 5-6 5-7 6-10 7-8 8-9 8-14 9-10 9-16

11-12 12-13 14-15 15-16 17-18 17-22 18-19 19-20 20-21 21-22
exact/norm bonds :
2-11 3-13 5-7 6-10 7-8 7-23 8-9 8-14 9-10 9-16 11-12 12-13 14-15 15-16 23-24
exact bonds :
10-17
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 17-18 17-22 18-19 19-20 20-21 21-22

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom
22:Atom 23:CLASS 24:Atom

L6 STRUCTURE UPLOADED

=> d
L6 HAS NO ANSWERS
L6 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l6 sss sam
SAMPLE SEARCH INITIATED 11:48:09 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 98 TO ITERATE

100.0% PROCESSED 98 ITERATIONS 10 ANSWERS
SEARCH TIME: 00.00.01

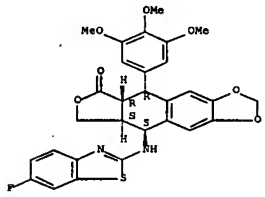
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1367 TO 2553
PROJECTED ANSWERS: 11 TO 389

L7 10 SEA SSS SAM L6

=> d scan

L7 10 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(6-fluoro-2-benzothiazolyl)amino]-5,8,8a,9-tetrahydro-5-(3,4,5-trimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI)
MF C29 H25 F N2 O7 S

Absolute stereochemistry.

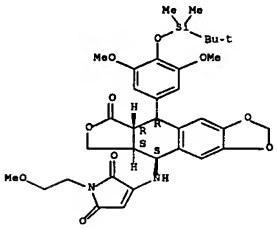


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L7 10 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-(2-methoxyethyl)- (9CI)
MF C34 H42 N2 O10 Si

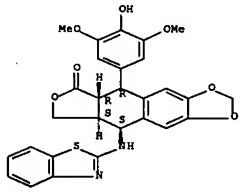
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 10 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(2-benzothiazolylamino)-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, [5R-(5α,5aβ,8aα,9β)]- (9CI)
MF C28 H24 N2 O7 S

Absolute stereochemistry.

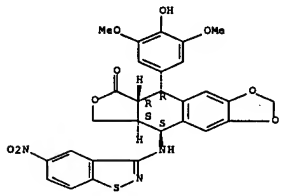


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L7 10 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[(5-nitro-1,2-benzisothiazol-3-yl)amino]-, (5R,5aR,8aS,9S)- (9CI)
MF C28 H23 N3 O9 S

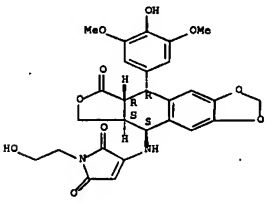
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 10 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-(2-hydroxyethyl)- (9CI)
MF C27 H26 N2 O10

Absolute stereochemistry.

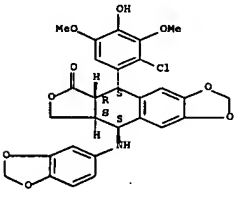


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L7 10 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(1,3-benzodioxol-5-ylamino)-5-(2-chloro-4-hydroxy-3,5-dimethoxyphenyl)-5,8,8a,9-tetrahydro-, [5S-(5α,5aβ,8aα,9β)]- (9CI)
MF C28 H24 Cl N O9

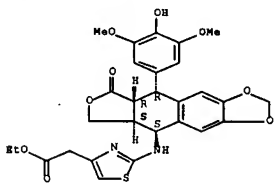
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 10 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 4-Thiazoleacetic acid, 2-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester (9CI)
MF C28 H28 N2 O9 S

Absolute stereochemistry.



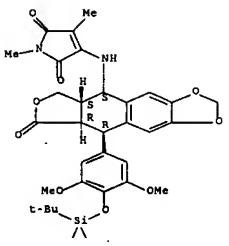
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L7 10 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1,4-dimethyl- (9CI)
MF C33 H40 N2 O9 Si

Absolute stereochemistry.

PAGE 1-A

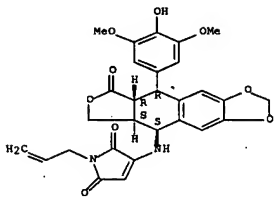


PAGE 2-A

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 10 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-(2-propenyl)- (9CI)
MF C28 H26 N2 O9

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s l6 sss full
FULL SEARCH INITIATED 11:48:30 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1934 TO ITERATE

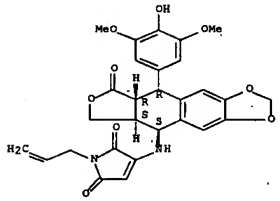
100.0% PROCESSED 1934 ITERATIONS 108 ANSWERS
SEARCH TIME: 00.00.01

L8 108 SEA SSS FUL L6

=> d scan

L8 108 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-(2-propenyl)- (9CI)
MF C28 H26 N2 O9

Absolute stereochemistry.

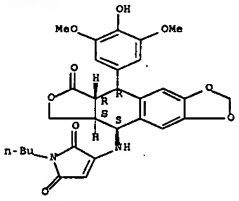


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L8 108 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1H-Pyrrole-2,5-dione, 1-butyl-3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]- (9CI)
MF C29 H30 N2 O9

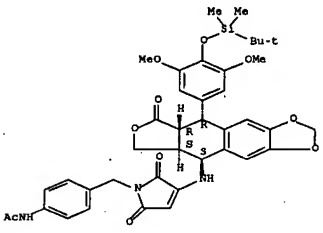
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L8 108 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Acetamide, N-[4-[[3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl]methyl]phenyl]- (9CI)
MF C40 H45 N3 O10 Si

Absolute stereochemistry.

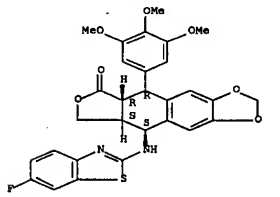


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L8 108 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(6-fluoro-2-benzothiazolyl)amino]-5,8,8a,9-tetrahydro-5-(3,4,5-trimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI)
MF C29 H25 F N2 O7 S

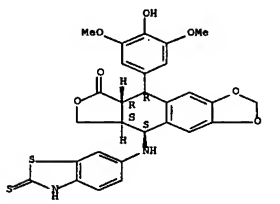
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L8 108 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(2,3-dihydro-2-thioxo-6-benzothiazolyl)amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI)
MF C28 H24 N2 O7 S2

Absolute stereochemistry.

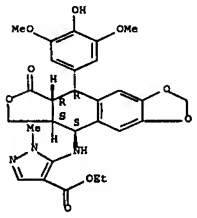


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L8 108 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN 1H-Pyrazole-4-carboxylic acid, 5-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-methyl-, ethyl ester (9CI)
MF C28 H29 N3 O9

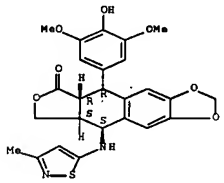
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L8 108 ANSWERS REGISTRY COPYRIGHT 2007 ACS on STN
IN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[(3-methyl-5-isothiazolyl)amino]-, (5R,5aR,8aS,9S)- (9CI)
MF C25 H24 N2 O7 S

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> file hcaplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	172.55	177.16

FILE 'HCAPLUS' ENTERED AT 11:48:49 ON 06 JUN 2007

FILE COVERS 1907 - 6 Jun 2007 VOL 146 ISS 24
FILE LAST UPDATED: 5 Jun 2007 (20070605/ED)

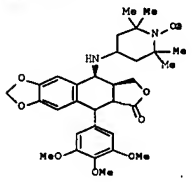
New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l8
L9 42 L8

=> d ibib abs hitstr 1-10

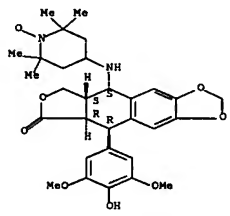
L9 ANSWER 1 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2007:154281 HCAPLUS Full-text
DOCUMENT NUMBER: 146:401730
TITLE: The absolute configuration of a nitroxide spin labeled derivative of podophyllotoxin determined by the crystal structure
AUTHOR(S): Zhou, Baohan; Yin, Guodong; Meng, Xianggao; Li, Yitao; Wu, Anxin
CORPORATE SOURCE: Key Laboratory of Pesticide and Chemical Biology, Ministry of Educstion, College of Chemistry, Central China Normal University, Wuhan, 430079, Peop. Rep. China
SOURCE: Canadian Journal of Chemistry (2006), 84(12), 1603-1606
CODEN: CJCHAG; ISSN: 0008-4042
PUBLISHER: National Research Council of Canada
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB The crystal structure of the nitroxide spin labeled derivative (I) of podophyllotoxin was first reported. X-ray anal. demonstrated that four contiguous chirsl centers in the mol., C1, C2, C3, and C4, adopt cis- (1:2), trans- (2:3), and cis- (3:4) arrangement.
IT 125670-69-1P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation of a nitroxide spin labeled derivative of podophyllotoxin and its absolute configuration determined by crystal structure)
RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

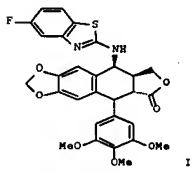
Absolute stereochemistry.



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:602288 HCAPLUS Full-text
DOCUMENT NUMBER: 145:62718
TITLE: Synthesis and biological activity of new 4β-N-heteroaryl analogues of podophyllotoxin
AUTHOR(S): Kamal, Ahmed; Kumar, B. Ashwini; Arifuddin, M.; Dastidar, Sunanda. G.
CORPORATE SOURCE: Division of Organic Chemistry, Indian Institute of Chemical Technology, Hyderabad, 500007, India
SOURCE: Letters in Drug Design & Discovery (2006), 3(3),

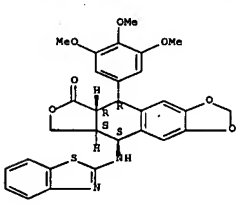
205-209
CODEN: LDDDAW; ISSN: 1570-1808
PUBLISHER: Bentham Science Publishers Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:62718
GI



I

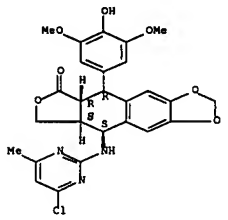
AB Five new 4β-N-heteroaryl analogs of podophyllotoxin, e.g. I, have been prepared by employing red phosphorus/I2 reagent system. Four of these 4β-N-heteroaryl analogs have been evaluated for their cytotoxicity against six human cancer cell lines with some representatives showing promising anticancer activity.
IT 748151-14-6P 748151-19-1P 891781-84-3P
891781-85-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis and biol. activity of new 4-N-heteroaryl analogs of podophyllotoxin)
RN 748151-14-6 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(2-benzothiazolylamino)-5,8,8a,9-tetrahydro-5-(3,4,5-trimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



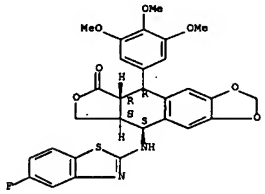
RN 748151-19-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(4-chloro-6-methyl-2-pyrimidinyl)amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



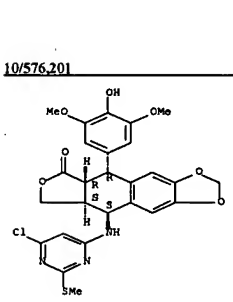
RN 891781-84-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(5-fluoro-2-benzothiazolyl)amino]-5,8,8a,9-tetrahydro-5-(3,4,5-trimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



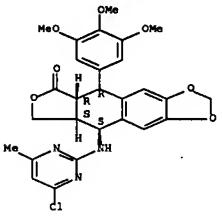
RN 891781-85-4 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[[6-chloro-2-(methylthio)-4-pyrimidinyl]amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT 748151-11-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis and biol. activity of new 4-N-heteroaryl analogs of podophyllotoxin)
RN 748151-11-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(4-chloro-6-methyl-2-pyrimidinyl)amino]-5,8,8a,9-tetrahydro-5-(3,4,5-trimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

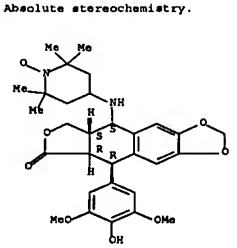


REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:65364 HCAPLUS Full-text
DOCUMENT NUMBER: 144:480533
TITLE: L-carnitine inhibits apoptotic DNA fragmentation induced by a new spin-labeled derivative of podophyllotoxin via caspase-3 in Raji cells
AUTHOR(S): Qi, She-Ning; Zhang, Zhi-Feng; Wang, Zhen-Yun; Yoshida, Akira; Ueda, Takanori
CORPORATE SOURCE: Department of Histology and Embryology, Lanzhou University, Lanzhou, 730000, Peop. Rep. China
SOURCE: Oncology Reports (2006), 15(1), 119-122
CODEN: OCRPEW; ISSN: 1021-335X

PUBLISHER: Oncology Reports
DOCUMENT TYPE: Journal
LANGUAGE: English
AB L-carnitine (β-hydroxy-trimethylaminobutyric acid) plays an essential metabolic role that consists of transferring the long chain fatty acids through the mitochondrial barrier, thus allowing their energy-yielding oxidation GP7 (4-[4"-(2", 2", 6", 6"-tetramethyl-1"-piperidinyloxy) amino]-4'-dimethyl-epipodophyllotoxin) is a new spin-labeled derivative of podophyllotoxin semi-synthesized by our university. In this study, we examined the activity of L-carnitine in GP7-induced apoptosis in Burkitt's lymphoma cell line, Raji. GP7 induced time- and dose-dependent apoptotic DNA fragmentation accompanied by caspase-3 activation in Raji cells, and the kinetics of caspase-3 activation induced by GP7 was well correlated with that of apoptotic DNA fragmentation. L-carnitine treatment prevented GP7-induced caspase-3 activation, suppressed caspase-3 cleavage and abrogated GP7-induced apoptotic DNA fragmentation in Raji cells. Our findings suggest that L-carnitine is a potent anti-apoptotic agent to human lymphoma cells and may exert its anti-apoptotic effect via inhibition of caspase-3 activity in GP7-treated Raji cells.
IT 125670-69-1, GP7
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(L-carnitine prevented GP7-induced caspase-3 activation, suppressed caspase-3 cleavage and abrogated GP7-induced apoptotic DNA fragmentation in Burkitt's lymphoma cell line, Raji)
RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 4 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:181189 HCAPLUS Full-text
DOCUMENT NUMBER: 142:261336
TITLE: Process for the preparation of new 9-aminopodophyllotoxin derivatives and antitumor pharmaceutical compositions containing them
INVENTOR(S): Monneret, Claude; Dauzonne, Daniel; Hickman, John; Pierre, Alain; Kraus, Berthier Laurence; Pfeiffer, Bruno; Renard, Pierre
PATENT ASSIGNEE(S): Les Laboratoires Servier, Fr.; Centre National de la Recherche Scientifique CNRS
SOURCE: Fr. Demande, 39 pp.
CODEN: FRXXBL

DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2859208	A1	20050304	FR 2003-10367	20030902
FR 2859208	B1	20060120		
CA 2546823	A1	20050317	CA 2004-2546823	20040901
WO 2005023817	A1	20050317	WO 2004-FR2218	20040901
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1664055	A1	20060607	EP 2004-787274	20040901
EP 1664055	B1	20061213		
R: CH, DE, FR, GB, LI				
US 2006247246	A1	20061102	US 2006-576201	20060417
PRIORITY APPLN. INFO.:			FR 2003-10367 A	20030902
			WO 2004-FR2218 W	20040901

OTHER SOURCE(S): CASREACT 142:261336; MARPAT 142:261336
GI

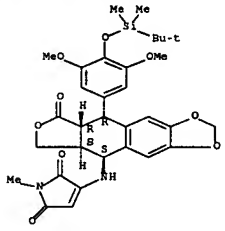
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB 9-Aminopodophyllotoxin derivs. I [R1 = H, alkyl, aryl, arylalkyle, heteroaryle, heteroarylalkyle, alkylcarbonyle, arylcarbonyle, arylalkylcarbonyle, alkoxycarbonyle, aryloxycarbonyle, arylalkoxycarbonyle, heterocycloalkoxycarbonyle, alkylsulfonyle, arylsulfonyle, arylalkylsulfonyle, phosphonic, Si(Ra)2Rb; Y = HNNH, NR2; R2 = H, (un)branched C1-6-alkyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, C2-6-alkenyl, C2-6-alkynyl, T1R5; R3 = H, alkyl, cycloalkyl, aryl, arylalkyl; R4 = H, alkyl; R5 = OH, (un)branched O-(C1-6-alkyl), (C1-6-alkyl)-C(:O), [(C1-6-alkyl)-O]C(:O), (C1-6-alkyl)-C(:O)O, CO2H, halogen, trihalomethyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, NRcRd; Ra, Rb = linear or branched C1-6-alkyl, aryl; Rc, Rd = H, (un)branched C1-6-alkyl; T1 = (un)branched C1-6-alkylene, (un)branched C2-6-alkenylene, (un)branched C2-6-alkynylene] their enantiomers, diastereoisomers or pharmaceutically acceptable acid or base additive salts are described. The procedure for the preparation of I comprises: (i) reaction of 9-aminopodophyllotoxin derivative II with R1'X [R1' = (un)branched C1-6-alkyl, aryl, aryl-(C1-6-alkyl), heteroaryl, heteroaryl-(C1-6-alkyl), (C1-6-alkyl)-carbonyl, arylcarbonyl, aryl-(C1-6-alkyl)carbonyl, C1-6-alkoxycarbonyl, aryloxycarbonyl, arylalkoxycarbonyl, heterocycloalkoxycarbonyl, etc.; X = H, halogen, usual organic leaving group] to give podophyllotoxin derivative (III); or (ii) reaction of II with GL [G = classical protective group; L = usual organic leaving group] to give podophyllotoxin derivative (IV); (iii) reaction of III or IV with R3X' [X' = H, halogen, G] to give 9-aminopodophyllotoxin derivative V (T = R1', G) ; (iv) reaction of V with heterocycle VI (Hal = halogen) and (v) removal of T to give I. Thus, (5S,5aS,8aR,9R)-I (R1 = R3 = R4 = H, Y = NMe) was prepared from (5R,5aR,8aS,9S)-II via silylation with Me3CMe2SiCl in DMF containing imidazole, conjugate addition to 3- bromo-1-methyl-1H-pyrrole-2,5- dione (VI; Hal = Br, R4 = H, Y = NMe), and desilylation with Dowex 50x2 (200 mesh) in MeOH. I can be used in the treatment of cancer [(5S,5aS,8aR,9R)-I (R1 = R3 = R4 = H, Y = NMe) gave T/C > 575% at 50 mg/Kg vs. murine leukemia P388 cells; IC50 = 54 nM vs. murine leukemia L1210 cells].

IT 846058-67-1P 846058-71-7P 846058-73-9P
846058-75-1P 846058-77-3P 846058-79-5P
846058-81-9P 846058-83-1P 846058-85-3P
846058-88-6P 846058-90-0P 846058-92-2P
846058-94-4P 846058-96-6P 846058-98-8P
846059-00-5P 846059-02-7P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation and desilylation of; preparation of new 9-aminopodophyllotoxin derivs. and antitumor pharmaceutical compns. containing them)

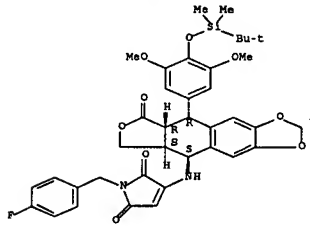
RN 846058-67-1 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



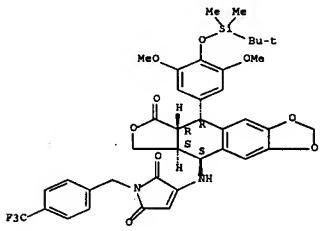
RN 846058-71-7 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-[(4-fluorophenyl)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



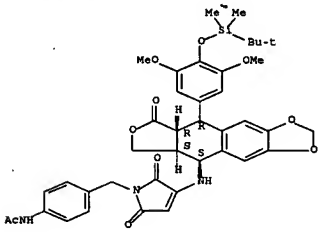
RN 846058-73-9 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-[[4-(trifluoromethyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



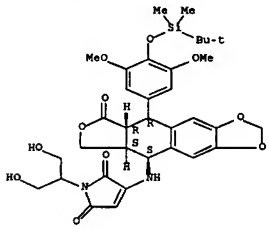
RN 846058-75-1 HCAPLUS
CN Acetamide, N-[4-[[3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



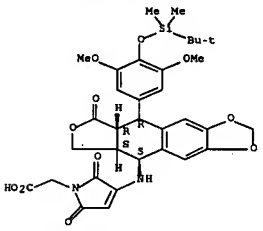
RN 846058-77-3 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-[2-hydroxy-1-(hydroxymethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



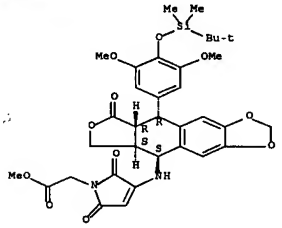
RN 846058-79-5 HCAPLUS
CN 1H-Pyrrole-1-acetic acid, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,5-dihydro-2,5-dioxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



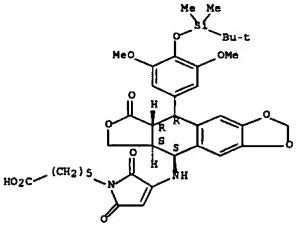
RN 846058-81-9 HCAPLUS
CN 1H-Pyrrole-1-acetic acid, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,5-dihydro-2,5-dioxo-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



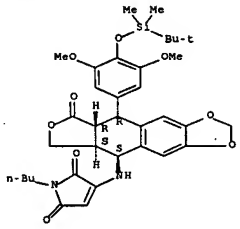
RN 846058-83-1 HCAPLUS
CN 1H-Pyrrole-1-hexanoic acid, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,5-dihydro-2,5-dioxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 846058-85-3 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 1-butyl-3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 846058-88-6 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1,4-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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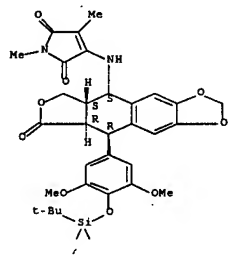

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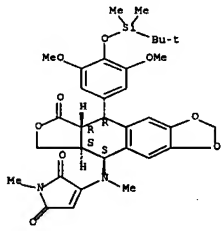
RN 846058-90-0 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]methylamino]-

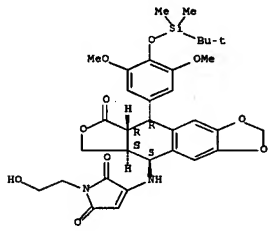
1-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



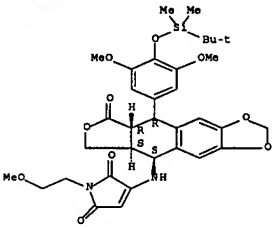
RN 846058-92-2 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



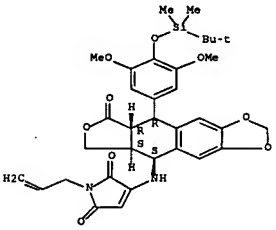
RN 846058-94-4 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-(2-methoxyethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



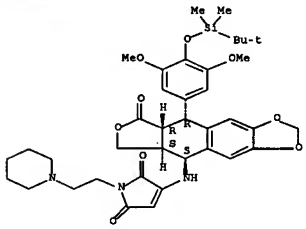
RN 846058-96-6 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-(2-propenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



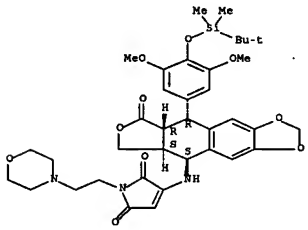
RN 846058-98-8 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-[2-(1-piperidinyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 846059-00-5 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 846059-02-7 HCAPLUS
CN 3,6-Pyridazinedione, 4-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1,2-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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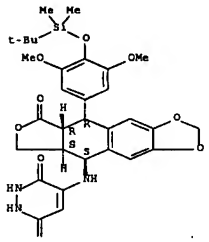

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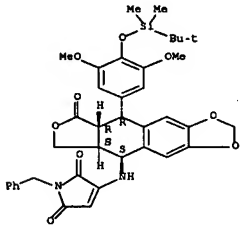
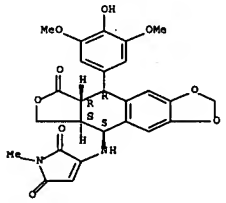
IT 846058-69-3P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of new 9-aminopodophyllotoxin derivs. and antitumor pharmaceutical compns. containing them)
RN 846058-69-3 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-9-[4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3,5-dimethoxyphenyl]-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



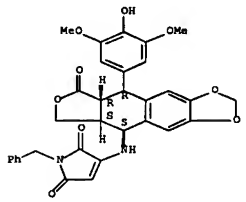
IT 846058-68-2P 846058-70-6P 846058-72-8P
846058-74-0P 846058-76-2P 846058-78-4P
846058-80-8P 846058-82-0P 846058-84-2P
846058-86-4P 846058-87-5P 846058-89-7P
846058-91-1P 846058-93-3P 846058-95-5P
846058-97-7P 846058-99-9P 846059-01-6P
846059-03-8P 846059-04-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of new 9-aminopodophyllotoxin derivs. and antitumor pharmaceutical compns. containing them)
RN 846058-68-2 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



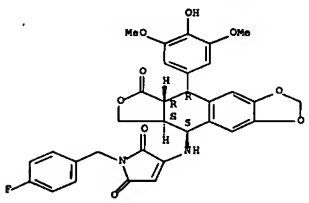
RN 846058-70-6 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



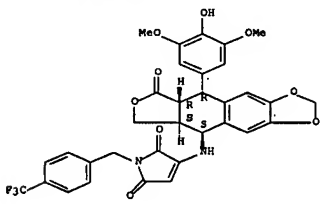
RN 846058-72-8 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 1-[(4-fluorophenyl)methyl]-3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



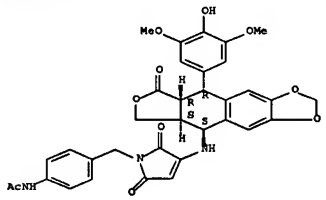
RN 846058-74-0 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-[[4-(trifluoromethyl)phenyl]methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



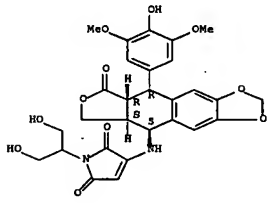
RN 846058-76-2 HCAPLUS
CN Acetamide, N-[4-[[3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,5-dihydro-2,5-dioxo-1H-pyrrol-1-yl]methyl]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



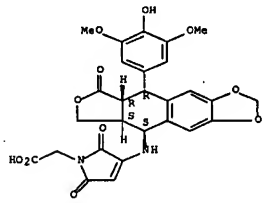
RN 846058-78-4 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-[2-hydroxy-1-(hydroxymethyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



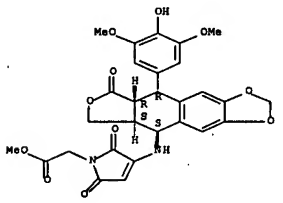
RN 846058-80-8 HCAPLUS
CN 1H-Pyrrole-1-acetic acid, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,5-dihydro-2,5-dioxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



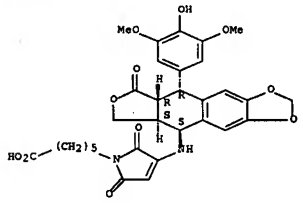
RN 846058-82-0 HCAPLUS
CN 1H-Pyrrole-1-acetic acid, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,5-dihydro-2,5-dioxo-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



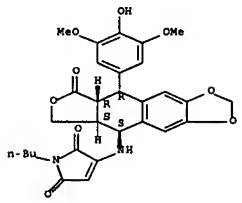
RN 846058-84-2 HCAPLUS
CN 1H-Pyrrole-1-hexanoic acid, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,5-dihydro-2,5-dioxo- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



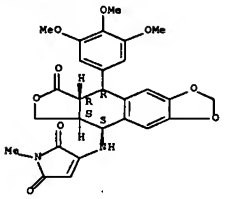
RN 846058-86-4 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 1-butyl-3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



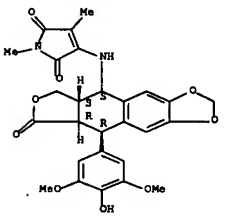
RN 846058-87-5 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-8-oxo-9-(3,4,5-trimethoxyphenyl)furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



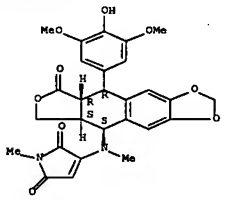
RN 846058-89-7 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1,4-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



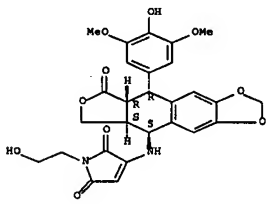
RN 846058-91-1 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]methylamino]-1-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 846058-93-3 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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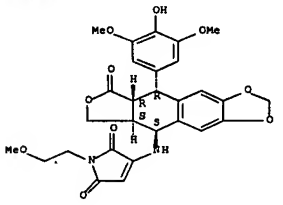
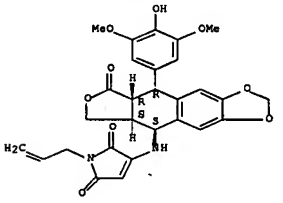
Absolute stereochemistry.



RN 846058-97-7 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-(2-propenyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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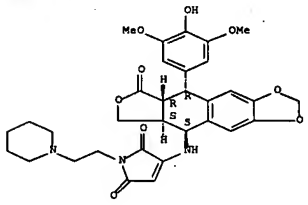
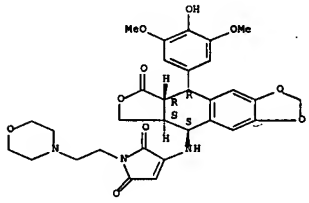
Absolute stereochemistry.



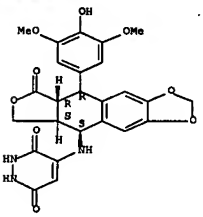
RN 846059-01-6 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



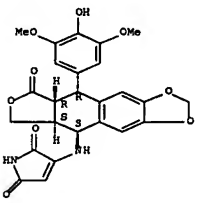
RN 846059-03-8 HCAPLUS
CN 3,6-Pyridazinedione, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1,2-dihydro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 846059-04-9 HCAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

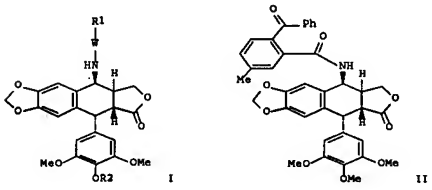


REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 5 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:718251 HCAPLUS Full-text
DOCUMENT NUMBER: 141:225206
TITLE: Preparation of 4β-amino and 4β-amido derivs. of podophyllotoxin and 4'-O-demethylepipodophyllotoxin as antitumor agents
INVENTOR(S): Kamal, Ahmed; Arifuddin, Mohammed; Kumar, Banala Ashwani; Dastidar, Sunanda Ghose
PATENT ASSIGNEE(S): Ranbaxy Laboratories Limited, India; Indian Institute of Chemical Technology
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004073375	A2	20040902	WO 2004-IB376	20040213
WO 2004073375	A8	20041021		
WO 2004073375	A3	20041223		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, ES, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
IN 2003DE00139	A	20050311	IN 2003-DE139	20030218
EP 1599485	A2	20051130	EP 2004-710936	20040213
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2007066837	A1	20070322	US 2006-545838	20061201
PRIORITY APPLN. INFO.:			IN 2003-DE139 A	20030218
			WO 2004-IB376 W	20040213

OTHER SOURCE(S): CASREACT 141:225206; MARPAT 141:225206
GI

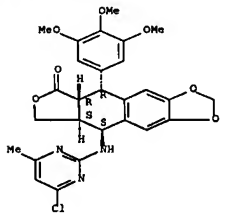


AB This invention relates to podophyllotoxin derivs., I (R1 = alkyl, haloalkyl, aryl, heterocyclic, CH2Y (where Y = halogen, amino, nitro, or hydroxyl, and n = 1-4) or (CH2)mZ (where Z = pyridine, piperidine, or morpholine, and m = 1-4); W = no atom, CO, SC, or SO2; R2 = H, or C1-C3 alkyl), which are useful for the treatment of tumors. Processes for the preparation of the compds. disclosed herein, pharmaceutical compns. containing these compds., and methods for treating tumors are provided. Thus, 4β-aminopodophyllotoxin was treated with 4-methylbenzophenone-2- carboxylic acid and diccylohexylcarbodiimide in dichloromethane to give II.

IT 748151-11-3P 748151-14-6P 748151-17-9P
748151-19-1P 748151-21-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 4β-amino and 4β-amido derivs. of podophyllotoxin and 4'-O-demethylepipodophyllotoxin as antitumor agents)

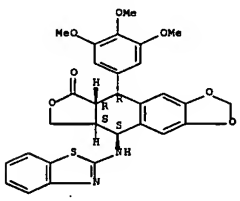
RN 748151-11-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(4-chloro-6-methyl-2-pyrimidinyl)amino]-5,8,8a,9-tetrahydro-5-(3,4,5-trimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



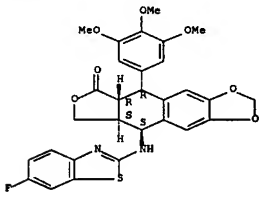
RN 748151-14-6 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(2-benzothiazolylamino)-5,8,8a,9-tetrahydro-5-(3,4,5-trimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



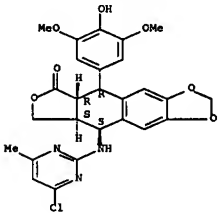
RN 748151-17-9 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(6-fluoro-2-benzothiazolyl)amino]-5,8,8a,9-tetrahydro-5-(3,4,5-trimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



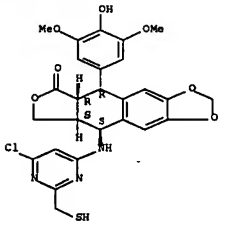
RN 748151-19-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(4-chloro-6-methyl-2-pyrimidinyl)amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



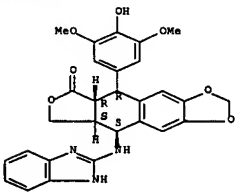
RN 748151-21-5 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[[6-chloro-2-(mercaptomethyl)-4-pyrimidinyl]amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 6 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:561483 HCAPLUS Full-text
DOCUMENT NUMBER: 141:218308
TITLE: Anti-AIDS agents. Part 61: Anti-HIV activity of new podophyllotoxin derivatives
AUTHOR(S): Zhu, Xiao-Kang; Guan, Jian; Xiao, Zhiyan; Cosentino, L. Mark; Lee, Kuo-Hsiung
CORPORATE SOURCE: Natural Products Laboratory, School of Pharmacy, University of North Carolina, Chapel Hill, NC, 27599-7360, USA
SOURCE: Bioorganic & Medicinal Chemistry (2004), 12(15), 4267-4273
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 141:218308
AB A series of novel podophyllotoxin derivs. containing structural modifications at C-4 (7-14), C-4' (16-17), and the methylenedioxy A-ring (23-28) was synthesized and tested for inhibition of HIV replication. Four of these compds. (25-28) were previously reported to show EC50 values of <0.001 μg/mL and therapeutic index (TI) values >120. Three of the newly tested compds. (8, 12, and 20) showed good activity with EC50 values of 0.012, <0.001, and 0.389 μg/mL and TI values of 19.1, >16, and 19.4, resp. A comparison of the anti-HIV activity of these derivs. suggested that an opened A-ring with 6,7-dimethoxy substitution and a 4'-demethylated E ring enhanced anti-HIV activity.
IT 242144-41-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(synthesis and structure activity relationships of anti-HIV activity of new podophyllotoxin derivs.)
RN 242144-41-8 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(1H-benzimidazol-2-ylamino)-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

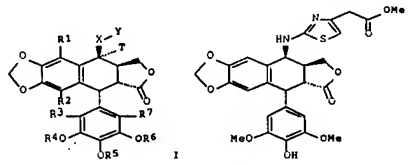


REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:333694 HCAPLUS Full-text
DOCUMENT NUMBER: 140:339123
TITLE: Preparation of podophyllotoxin derivatives as anticancer compounds
INVENTOR(S): Shi, Qian; Wang, Hui-kang; Oyama, Masayoshi; Vance, John Robert; Chen, Ming S.
PATENT ASSIGNEE(S): Plantaceutica Inc., USA
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004033423	A2	20040422	WO 2003-US32547	20031014
WO 2004033423	A3	20040729		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2501901	A1	20040422	CA 2003-2501901	20031014
AU 2003300385	A1	20040504	AU 2003-300385	20031014
US 2004136288	A1	20040715	US 2003-685870	20031014
US 6903133	B2	20050607		
EP 1610790	A2	20060104	EP 2003-808232	20031014
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006503079	T	20060126	JP 2004-543785	20031014
PRIORITY APPLN. INFO.:			US 2002-417785P P	20021011
			WO 2003-US32547 W	20031014

OTHER SOURCE(S): MARPAT 140:339123
GI



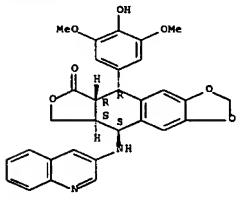
I II

AB Podophyllotoxin derivs., such as I [R1, R2, R3, R7 = H, alkyl; R4, R6 = alkyl; R5 = H, P(O)(ORa)2; Ra = H, alkyl; T = H; XT = :N; X = bond, O, S, NRb; Rb = H, alkyl; Y = 5-membered heteroaryl or heterocyclyl, optionally substituted with one or more halogen, alkyl, cyclyl, aryl, heteroaryl, heterocyclyl, etc.], were prepared for their therapeutic use as anticancer agents. Thus, podophyllotoxin derivative II was prepared via a multistep synthetic sequence starting from 4'-demethyl-4β-bromo-4- desoxypodophyllotoxin (prepared from podophyllotoxin), 2-aminothiazole-4- acetic acid and (trimethylsilyl)diazomethane. II showed unexpectedly high levels of cellular protein-linked DNA breaks (PLDB) induction in KB cells when tested at 5μg/mL. This invention also features a method for treating cancer.

IT 127882-77-3P 681138-02-3P 681138-04-5P
681138-06-7P 681138-07-8P 681138-08-9P
681138-09-0P 681138-10-3P 681138-13-6P
681138-14-7P 681138-15-8P 681138-16-9P
681138-17-0P 681138-18-1P 681138-19-2P
681138-20-5P 681138-21-6P 681138-22-7P
681138-23-8P 681138-24-9P 681138-25-0P
681138-28-3P 681138-29-4P 681138-30-7P
681138-31-8P 681138-32-9P 681138-33-0P
681138-34-1P 681138-35-2P 681138-36-3P
681138-37-4P 681138-39-6P 681138-40-9P
681138-41-0P 681138-42-1P 681138-43-2P
681138-44-3P 681138-45-4P 681138-46-5P
681138-47-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of podophyllotoxin derivs. as anticancer compds.)

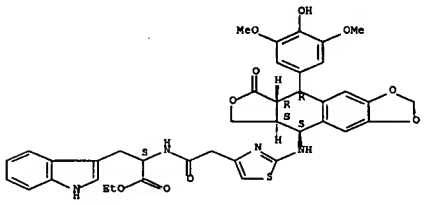
RN 127882-77-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-quinolinylamino)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



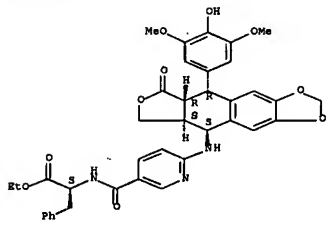
RN 681138-02-3 HCAPLUS
CN L-Tryptophan, N-[[2-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-4-thiazolyl]acetyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



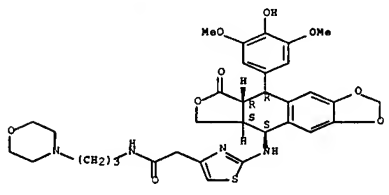
RN 681138-04-5 HCAPLUS
CN L-Phenylalanine, N-[(6-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-3-pyridinyl]carbonyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



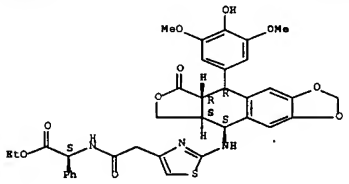
RN 681138-06-7 HCAPLUS
CN 4-Thiazoleacetamide, 2-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-N-[3-(4-morpholinyl)propyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



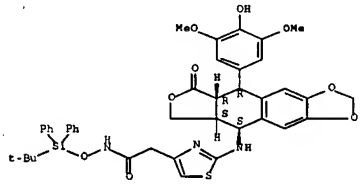
RN 681138-07-8 HCAPLUS
CN Benzeneacetic acid, α-[[[2-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-4-thiazolyl]acetyl]amino]-, ethyl ester, (αS)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



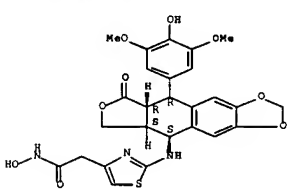
RN 681138-08-9 HCAPLUS
CN 4-Thiazoleacetamide, N-[[(1,1-dimethylethyl)diphenylsilyl]oxy]-2-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



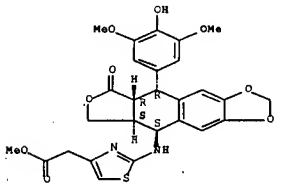
RN 681138-09-0 HCAPLUS
CN 4-Thiazoleacetamide, 2-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



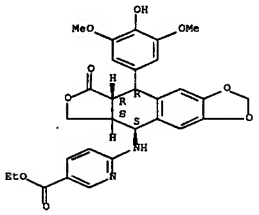
RN 681138-10-3 HCAPLUS
CN 4-Thiazoleacetic acid, 2-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



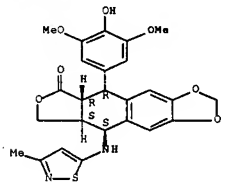
RN 681138-13-6 HCAPLUS
CN 3-Pyridinecarboxylic acid, 6-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



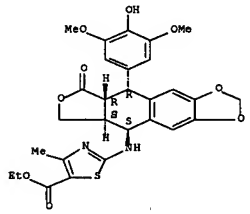
RN 681138-14-7 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[(3-methyl-5-isothiazolyl)amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



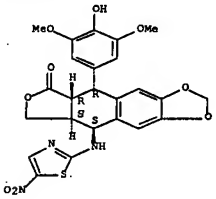
RN 681138-15-8 HCAPLUS
CN 5-Thiazolecarboxylic acid, 2-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-4-methyl-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



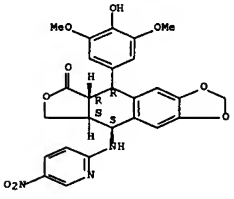
RN 681138-16-9 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[(5-nitro-2-thiazolyl)amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



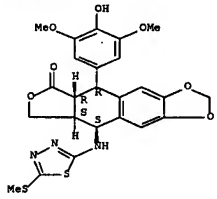
RN 681138-17-0 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[(5-nitro-2-pyridinyl)amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



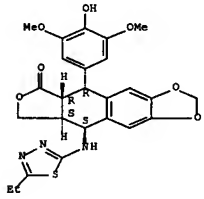
RN 681138-18-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[5-(methylthio)-1,3,4-thiadiazol-2-yl]amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



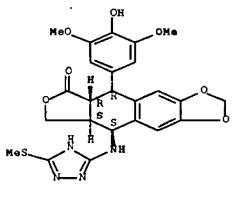
RN 681138-19-2 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(5-ethyl-1,3,4-thiadiazol-2-yl)amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



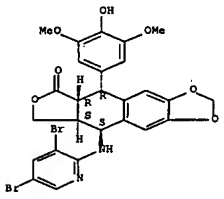
RN 681138-20-5 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[5-(methylthio)-1H-1,2,4-triazol-3-yl]amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



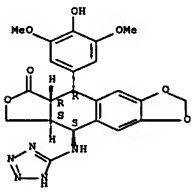
RN 681138-21-6 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(3,5-dibromo-2-pyridinyl)amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



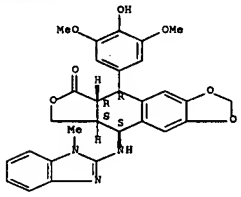
RN 681138-22-7 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(1H-tetrazol-5-ylamino)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



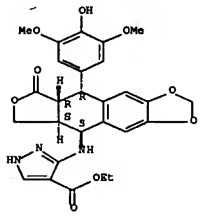
RN 681138-23-8 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[(1-methyl-1H-benzimidazol-2-yl)amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



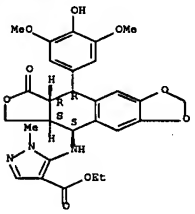
RN 681138-24-9 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 3-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



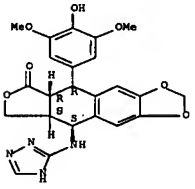
RN 681138-25-0 HCAPLUS
CN 1H-Pyrazole-4-carboxylic acid, 5-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-1-methyl-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



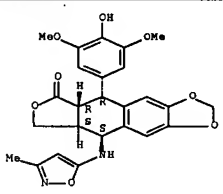
RN 681138-28-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(1H-1,2,4-triazol-3-ylamino)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



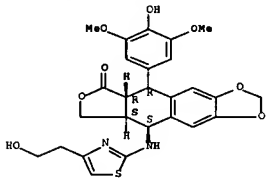
RN 681138-29-4 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[(3-methyl-5-isoxazolyl)amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



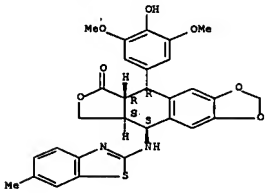
RN 681138-30-7 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[4-(2-hydroxyethyl)-2-thiazolyl]amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



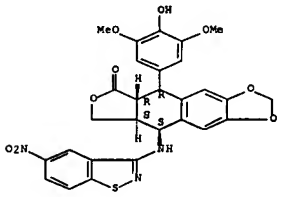
RN 681138-31-8 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[(6-methyl-2-benzothiazolyl)amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



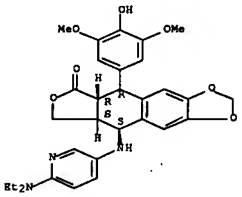
RN 681138-32-9 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[(5-nitro-1,2-benzisothiazol-3-yl)amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



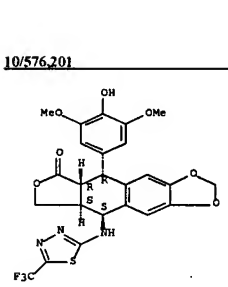
RN 681138-33-0 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[[6-(diethylamino)-3-pyridinyl]amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 681138-34-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[5-(trifluoromethyl)-1,3,4-thiadiazol-2-yl]amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 681138-35-2 HCAPLUS
CN 3-Pyridinecarboxamide, N-(2-chloro-4-pyridinyl)-6-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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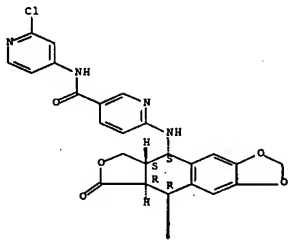
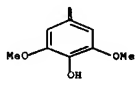


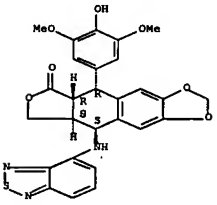
PAGE 2-A



RN 681138-36-3 HCAPLUS

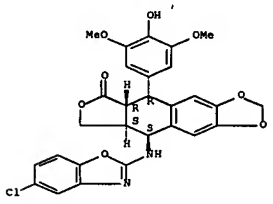
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(2,1,3-benzothiadiazol-4-ylamino)-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



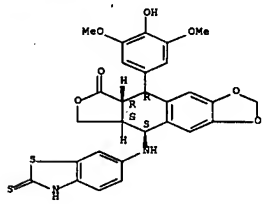
RN 681138-37-4 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(5-chloro-2-benzoxazolyl)amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



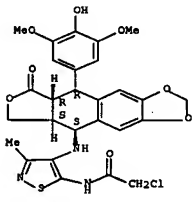
RN 681138-39-6 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(2,3-dihydro-2-thioxo-6-benzothiazolyl)amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



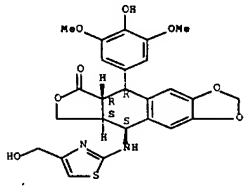
RN 681138-40-9 HCAPLUS
CN Acetamide, 2-chloro-N-[4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-3-methyl-5-isothiazolyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



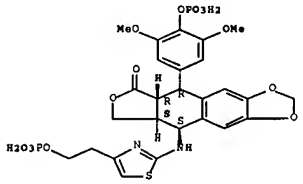
RN 681138-41-0 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[4-(hydroxymethyl)-2-thiazolyl]amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



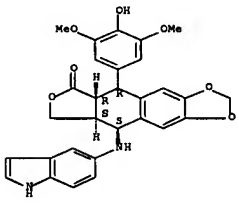
RN 681138-42-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5-[3,5-dimethoxy-4-(phosphonooxy)phenyl]-5,8,8a,9-tetrahydro-9-[[4-[2-(phosphonooxy)ethyl]-2-thiazolyl]amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



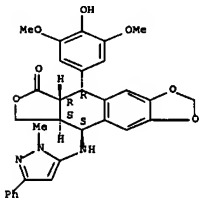
RN 681138-43-2 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(1H-indol-5-ylamino)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



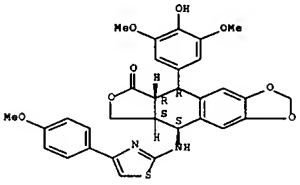
RN 681138-44-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[(1-methyl-3-phenyl-1H-pyrazol-5-yl)amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



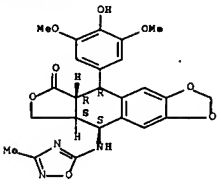
RN 681138-45-4 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[4-(4-methoxyphenyl)-2-thiazolyl]amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



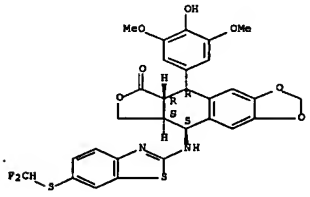
RN 681138-46-5 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[(3-methyl-1,2,4-oxadiazol-5-yl)amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



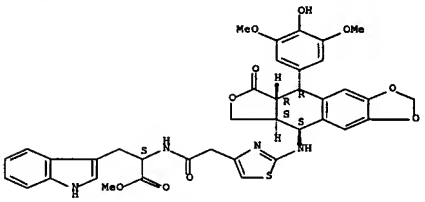
RN 681138-47-6 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[[6-[(difluoromethyl)thio]-2-benzothiazolyl]amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



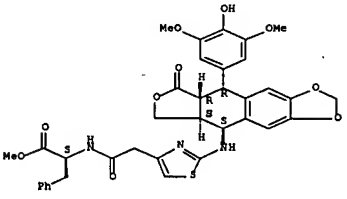
IT 681138-01-2 681138-03-4 681138-05-6
681138-12-5
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of podophyllotoxin derivs. as anticancer compds.)
RN 681138-01-2 HCAPLUS
CN L-Tryptophan, N-[[2-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-4-thiazolyl]acetyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



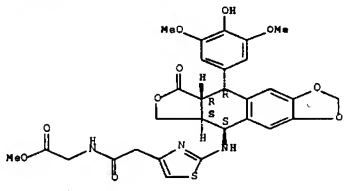
RN 681138-03-4 HCAPLUS
CN L-Phenylalanine, N-[[2-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-4-thiazolyl]acetyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



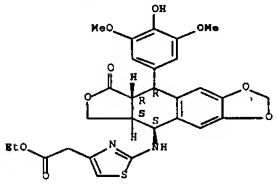
RN 681138-05-6 HCAPLUS
CN Glycine, N-[[2-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-4-thiazolyl]acetyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 681138-12-5 HCAPLUS
CN 4-Thiazoleacetic acid, 2-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

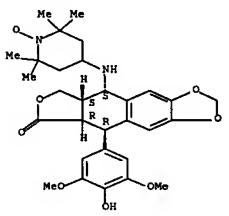
Absolute stereochemistry.



L9 ANSWER 8 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:72704 HCAPLUS Full-text
DOCUMENT NUMBER: 141:17025
TITLE: GP7 can induce apoptotic DNA fragmentation of human leukemia cells through caspase-3-dependent and -independent pathways
AUTHOR(S): Qi, She-Ning; Yoshida, Akira; Wang, Zi-Ren; Ueda, Takanori
CORPORATE SOURCE: School of Life Science, Lanzhou University, Lanzhou, 730000, Peop. Rep. China
SOURCE: International Journal of Molecular Medicine (2004), 13(1), 163-167
CODEN: IJMMFG; ISSN: 1107-3756
PUBLISHER: International Journal of Molecular Medicine
DOCUMENT TYPE: Journal
LANGUAGE: English
AB GP7 (4-[4''-(2'',2'',6'',6''-tetramethyl-1''-piperidinyloxy)amino]-4'- demethyl epipodophyllotoxin), a new spin-labeled derivative of podophyllotoxin, is a promising anticancer drug of podophyllotoxin class. The primary effect of GP7 is the anticancer activity on transplanted mouse tumors and cultured tumor cells. However, its mol. mechanism of action is still obscure. In this study, we investigated the activity of GP7 to induce apoptosis in human leukemia HL-60 and Jurkat cells. Apoptosis was determined by

detection of DNA fragmentation in agarose gel electrophoresis. GP7 induced apoptotic DNA fragmentation of HL-60 and Jurkat cells in time- and dose-dependent manner. We further investigated the activity of caspase-3 in GP7-induced apoptotic DNA fragmentation of HL-60 and Jurkat cells. GP7 also induced time- and dose-dependent caspase-3 activation in both cell lines, and the kinetics of caspase-3 activation induced by GP7 was well correlated with that of apoptotic DNA fragmentation. To determine the role of caspase-3 in GP7-induced apoptotic DNA fragmentation, we examined the effect of specific caspase-3 inhibitor, Ac-DEVD-CHO, on GP7-induced apoptotic DNA fragmentation. Ac-DEVD-CHO prevented GP7-induced caspase-3 activation in both HL-60 and Jurkat cells, however, it only inhibited GP7-induced apoptotic internucleosomal DNA fragmentation in HL-60 cells. We then employed L-carnitine to investigate the role of caspase-3 in GP7-induced apoptotic DNA fragmentation. L-carnitine treatment prevented GP7-induced caspase-3 activation in both cell lines in a dose-dependent manner. Similar to Ac-DEVD-CHO, L-carnitine only inhibited GP7-induced apoptotic internucleosomal DNA fragmentation in HL-60 cells. These findings suggest that GP7 exerts an anti-leukemic effect by both caspase-3-dependent and -independent apoptotic signaling pathways.
IT 125670-69-1, GP7
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(GP7-induced apoptotic DNA fragmentation of human leukemia cells through caspase-3-dependent and -independent pathways)
RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.

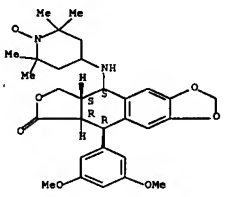


REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 9 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:12453 HCAPLUS Full-text
DOCUMENT NUMBER: 139:185779
TITLE: Micellar electrokinetic capillary chromatographic separation of diastereoisomers of podophyllum lignans at the C4 position
AUTHOR(S): Liu, Shuhui; Tian, Xuan; Chen, Xingguo; Hu, Zhide
CORPORATE SOURCE: Department of Chemistry, Lanzhou University, Lanzhou, 730000, Peop. Rep. China
SOURCE: Chromatographia (2002), 56(11/12), 687-691
CODEN: CHRGB7; ISSN: 0009-5893
PUBLISHER: Friedrich Vieweg & Sohn Verlagsgesellschaft mbH
DOCUMENT TYPE: Journal
LANGUAGE: English

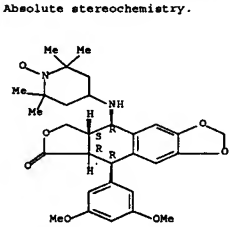
AB Seven pairs of diastereoisomers of podophyllum lignans at the C4 position, including three pairs of spin-labeled compds., have been separated within 20 min by MEKC with 20 mM sodium tetraborate-30 mM SDS-10% (volume/volume) 2-propanol (pH 9.5-9.7) as running buffer. The migration behavior of the compds. was explained satisfactorily on the basis of on their polarity and geometry. The method can be used to identify the purity of the lignans, and to determine the C4-H configurations of the spin-labeled derivs.
IT 579495-96-8 579495-97-9
RL: ANT (Analyte); ANST (Analytical study)
(micellar electrokinetic capillary chromatog. separation of diastereoisomers of podophyllum lignans at the C4 position)
RN 579495-96-8 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-9-(3,5-dimethoxyphenyl)-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 579495-97-9 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5R,5aS,8aR,9R)-9-(3,5-dimethoxyphenyl)-5,5a,6,8,8a,9-hexahydro-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

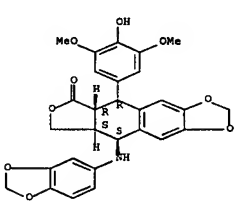


REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 10 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN

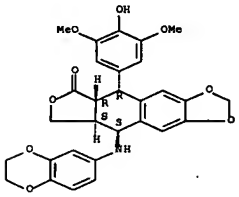
ACCESSION NUMBER: 2002:306357 HCAPLUS Full-text
DOCUMENT NUMBER: 137:56983
TITLE: Antitumor Agents. 213.Modeling of Epipodophyllotoxin Derivatives Using Variable Selection k Nearest Neighbor QSAR Method
AUTHOR(S): Xiao, Zhiyan; Xiao, Yun-De; Feng, Jun; Golbraikh, Alexander; Tropsha, Alexander; Lee, Kuo-Hsiung
CORPORATE SOURCE: Natural Products Laboratory Division of Medicinal Chemistry and Natural Products School of Pharmacy, University of North Carolina at Chapel Hill, Chapel Hill, NC, 27599, USA
SOURCE: Journal of Medicinal Chemistry (2002), 45(11), 2294-2309
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB We have applied a variable selection k nearest neighbor quant. structure-activity relationship (kNN QSAR) method to develop predictive QSAR models for 157 epipodophyllotoxins synthesized previously in our ongoing effort to develop potential anticancer agents. QSAR models were generated using multiple topol. descriptors of chemical structures, including mol. connectivity indexes (MCI) and mol. operating environment descriptors. The 157 compds. were separated into several training and test sets. The robustness of QSAR models was characterized by the values of the internal leave one out cross-validated R2 (q2) for the training set and external predictive R2 for the test set. The significance of the training set models was confirmed by statistically higher values of q2 for the original data set as compared to q2 values for the same data set with randomly shuffled activities. KNN QSAR models were compared with those obtained with the comparative mol. field anal. method; the kNN QSAR approach afforded models with higher values of both q2 and predictive R2. One of the best models obtained from kNN anal. using MCI as descriptors provided q2 and predictive R2 values of 0.60 and 0.62, resp. QSAR models developed in these studies shall aid in future design of novel potent epipodophyllotoxin derivs.
IT 127682-68-2 127682-69-3 127682-75-1
127682-76-2 127682-77-3 147199-62-0
152833-13-1 152833-17-5 152866-04-9
155157-47-4 242144-41-8
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(use of variable selection k nearest neighbor quant. structure-activity relationship method to develop predictive QSAR models for epipodophyllotoxins derivs. as potential anticancer agents)
RN 127682-68-2 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(1,3-benzodioxol-5-ylamino)-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



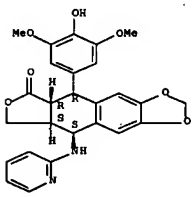
RN 127882-69-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(2,3-dihydro-1,4-benzodioxin-6-yl)amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



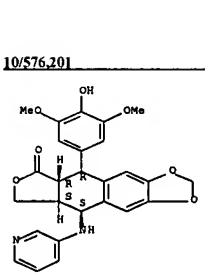
RN 127882-75-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(2-pyridinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



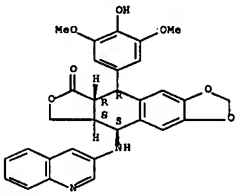
RN 127882-76-2 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-pyridinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



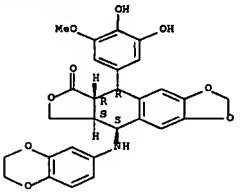
RN 127882-77-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-quinolinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



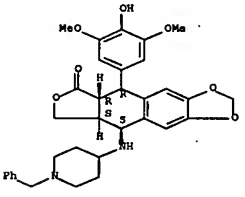
RN 147199-62-0 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(2,3-dihydro-1,4-benzodioxin-6-yl)amino]-5-(3,4-dihydroxy-5-methoxyphenyl)-5,8,8a,9-tetrahydro-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



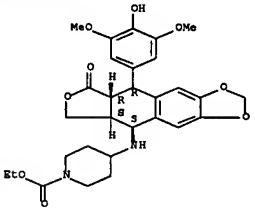
RN 152833-13-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[1-(phenylmethyl)-4-piperidinyl]amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



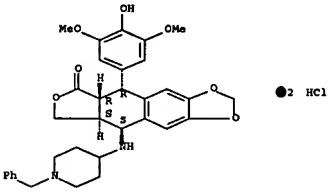
RN 152833-17-5 HCAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



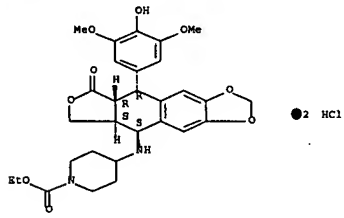
RN 152886-04-9 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[1-(phenylmethyl)-4-piperidinyl]amino]-, dihydrochloride, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



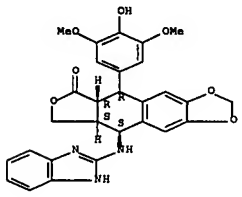
RN 155157-47-4 HCAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 242144-41-8 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(1H-benzimidazol-2-ylamino)-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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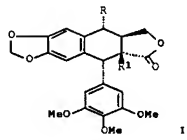
=> d ibib abs hitstr 11-
YOU HAVE REQUESTED DATA FROM 32 ANSWERS - CONTINUE? Y/(N):y

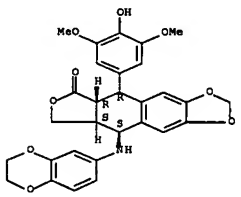
L9 ANSWER 11 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2001:214544 HCAPLUS Full-text
DOCUMENT NUMBER: 135:19486
TITLE: Antitumor Agents. 207. Design, Synthesis, and Biological Testing of 4β-Anilino-2-fluoro-4'-demethylpodophyllotoxin Analogues as Cytotoxic and Antiviral Agents
AUTHOR(S): VanVliet, David S.; Tachibana, Yoko; Bastow, Kenneth F.; Huang, Eng-Shang; Lee, Kuo-Hsiung
CORPORATE SOURCE: Natural Products Laboratory School of Pharmacy, University of North Carolina, Chapel Hill, NC, 27599-7360, USA

SOURCE: Journal of Medicinal Chemistry (2001), 44(9), 1422-1428
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:19486
GI



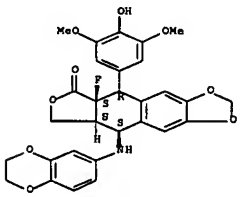
AB 2-Fluoropodophyllotoxin (I, R = OH, R1 = F) and several 4β-anilino-2-fluoro-4'-O-demethyl analogs were synthesized and evaluated in both antineoplastic and antiviral assays. These compds. were moderately active against some cancer cell lines, but they were less active than the corresponding nonfluorinated analogs. I (R = OH, R1 = F) exhibited the best activity against KB carcinoma with a GI50 of approx. 30 nM. Most compds. exhibited moderate activity against HCMV with ID50 and ID90 values in the range of 1 μM and 4 μM, resp. Both I (R = OSiMe2Bu-t, R1 = H) and I (R = OH, R1 = F) showed an unusual 10-fold selectivity for HSV-2 compared to HSV-1.
IT 127882-69-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(preparation and antineoplastic and antiviral activity of 4β-anilino-2-fluoro-4'-demethylpodophyllotoxin analogs)
RN 127882-69-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(2,3-dihydro-1,4-benzodioxin-6-yl)amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 342824-64-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and antineoplastic and antiviral activity of 4β-anilino-2-fluoro-4'-demethylpodophyllotoxin analogs)
RN 342824-64-0 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(2,3-dihydro-1,4-benzodioxin-6-yl)amino]-5a-fluoro-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aS,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

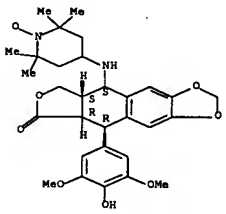


REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 12 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:236644 HCAPLUS Full-text
DOCUMENT NUMBER: 133:26571
TITLE: 4-[4"-(2",2",6",6"-Tetramethyl-1"-piperidinyloxy)amino]-4'-demethylepipodophyllotoxin inducing NB4 cell apoptosis
AUTHOR(S): Qi, She-Ning; Wan, Shun-Mei; Li, Xing-Yu; Li, Wen-Guang; Wang, Jing
CORPORATE SOURCE: Inst. Hematology, Lanzhou Medical College, Lanzhou, 730000, Peop. Rep. China
SOURCE: Zhongguo Yaolixue Yu Dulixue Zazhi (2000), 14(1), 62-64
CODEN: ZYYZEW; ISSN: 1000-3002
PUBLISHER: Zhongguo Yaolixue Yu Dulixue Zazhi Biarjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB To explore the antitumor mechanism of 4-[4"-(2",2",6",6"-tetramethyl-1"-piperidinyloxy)amino]-4'-demethylepipodophyllotoxin (GP7) in apoptosis, the growth inhibition effects of GP7 on leukemic NB4 cell line, the morphol. of NB4 cell under light and electron microscope and the DNA ladder on agarose gel electrophoresis were observed GP7 0.18-18 μmol·L-1 could markedly inhibit the growth and proliferation of NB4. GP7-induced apoptotic morphol. changes were found under both light and electron microscopes and the ladder was observed by agarose gel electrophoresis. Apoptosis rate increased as time prolonged. The peak of apoptosis rate (45.0±3.0)% was reached at 48 h when NB4 was being exposed to GP7 9 μmol·L-1. Apoptosis rate decreased to (26.7±1.5)% with prolonged exposure time to 72 h. There was a correlation between apoptosis rates and logarithmic GP7 concentration (r = 0.938, P < 0.05). We for the first time found that GP7 could induce NB4 apoptosis and the induction of apoptosis may be one of the anti-tumor mechanisms of GP7.
IT 125670-69-1, GP7

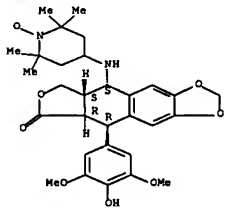
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
([(tetramethylpiperidinyloxy)amino]demethylepipodophyllotoxin inducing NB4 cell apoptosis)
RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.

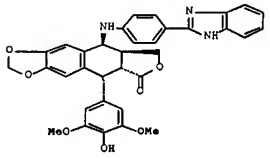


L9 ANSWER 13 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:449460 HCAPLUS Full-text
DOCUMENT NUMBER: 132:73293
TITLE: Study on effect of GP7 against Raji cell apoptosis
AUTHOR(S): Qi, Shening; Wang, Jing
CORPORATE SOURCE: Institute of Hematology, Lanzhou Medical College, Lanzhou, 730000, Peop. Rep. China
SOURCE: Zhongguo Yaolixue Tongbao (1999), 15(2), 187-188
CODEN: ZYTOE8; ISSN: 1001-1978
PUBLISHER: Anhui Yike Daxue Linchuan Yaoli Yanjiuso
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The effect of GP7 (4-[4"-(2",2",6",6"-tetramethyl-1"-piperidinyloxy)amino]- 4'-demethyl epipodophyllotoxin) against Raji cell apoptosis was studied. The inhibitory test in solution medium, the inhibitory test in semi-solid medium and MTT method were used for evaluation of the effect of GP7 against Raji cell apoptosis. The results showed that GP7 significantly inhibited the growth of Raji cell, the formation of Raji clone cell and the proliferation of Raji cell in a concentration-dependent manner. The highest apoptosis index was at 9 μmol L-1.
IT 125670-69-1, GP7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of GP7 against Raji cell apoptosis)
RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 14 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1999:372441 HCAPLUS Full-text
DOCUMENT NUMBER: 131:199550
TITLE: Antitumor Agents. 194. Synthesis and Biological Evaluations of 4-β-Mono-, -Di-, and -Trisubstituted Aniline-4'-O-demethylpodophyllotoxin and Related Compounds with Improved Pharmacological Profiles
AUTHOR(S): Zhu, Xiao-Kang; Guan, Jian; Tachibana, Yoko; Bastow, Kenneth F.; Cho, Sung Jin; Cheng, Huey-Hwa; Cheng, Yung-Chi; Gurwith, Marc; Lee, Kuo-Hsiung
CORPORATE SOURCE: Division of Medicinal Chemistry and Natural Products School of Pharmacy, University of North Carolina at Chapel Hill, Chapel Hill, NC, 27599, USA
SOURCE: Journal of Medicinal Chemistry (1999), 42(13), 2441-2446
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



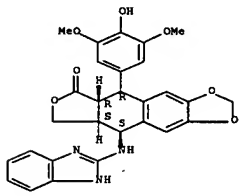
I

AB Several new 4-β-substituted 4'-O-demethyl-4-desoxypodophyllotoxins having mono-, di-, or trisubstituted anilines were prepared and evaluated as inhibitors of DNA topoisomerase II

and tumor cell growth in tissue culture. Selected compds. were evaluated as cytotoxic agents using a clonogenic survival assay. The target compds. included 4'-O-demethyl-4β-[(4''-(benzimidazol-2''-yl)anilino]- (I), 4'-O-demethyl-4β-(-)-(4''-camphanamidoanilino)-, 4-β- disubstituted-anilino-4'-demethyl-, 4-α-disubstituted-anilino-4'- demethyl-, 4-β-trisubstituted-anilino- and 4'-O-demethyl-4β-[4''- (benzimidazol-2''-yl)amino]-4-desoxypodophyllotoxin. I displayed significant growth inhibitory action against a panel of tumor cell lines including human epidermoid carcinoma of the nasopharynx (KB) and its etoposide-resistant (KB7B) and vincristine-resistant (vin20c KB) subclones, lung carcinoma (A549), human ileocecal carcinoma (HCT-8), human kidney carcinoma (CAKI-1), breast adenocarcinoma (MCF-7), and human malignant melanoma (SK-MEL-2) cells. Several compds. including I were "cleavable-complex"-forming DNA topoisomerase II inhibitors with either improved or similar activity compared with the prototype drug etoposide (VP-16). I was the most active analog, being 10-fold more potent than etoposide in both cell killing and topoisomerase II inhibition in vitro assays. Using mouse models of antitumor activity, I was effective against (P388/0) leukemia but not against the growth of a (MCF-7) mammary tumor.

IT 242144-41-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and biol. evaluation of aniline substituted 4'-O-demethylpodophyllotoxin antitumor agents)
RN 242144-41-6 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(1H-benzimidazol-2-ylamino)-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

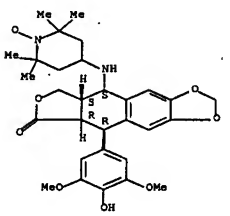
L9 ANSWER 15 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1998:742970 HCAPLUS Full-text
DOCUMENT NUMBER: 130:104952
TITLE: Effects of spin labeled derivatives of podophyllotoxin on cell cycle and macromolecular synthesis in human lymphoid leukemia molt 4B cells
AUTHOR(S): Wang, Jun-Zhi; Tsumura, Hideki; Shimura, Keishiro; Tian, Xuan; Ito, Hitoshi
CORPORATE SOURCE: Department of Biochemistry, National Institute for the Control of Pharmaceutical and Biological Products, Beijing, 100050, Peop. Rep. China
SOURCE: Zhongguo Yaoli Xuebao (1998), 19(6), 501-505
CODEN: CYLPDN; ISSN: 0253-9756

PUBLISHER: Kexue Chubansha
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB Aim: To examine the effect of the spin labeled derivs. of podophyllotoxin, N-podophyllic acid-N''-[4-(2,2,6,6-tetramethyl-1-piperidinyloxy)] thiosemicarbazide (GP4) and 4-[4''-(2'', 2'', 6'', 6''-tetramethyl-1''- piperidinyloxy} amino]-4'-demethylepipodophyllotoxin (GP7) on the cell cycle and macromol. synthesis of human lymphoid leukemia Molt 4B cells in vitro. Methods: MTT assay, 3H incorporation, and flow cytometer was used. Results: GP4, GP7, and etoposide 0.02-100 mmol.L-1 cultured for 48 h inhibited the proliferation of human lymphoid leukemia Molt 4B cells. IC50 values of GP4, GP7, and etoposide were 0.11, 4.7, and 1.6 mmol.L-1, resp. DNA and protein syntheses were obviously suppressed by GP4, GP7, and etoposide 10 mmol.L-1 for 48 h. After Molt 4B cells were treated with GP4, GP7, and etoposide 10 mmol.L-1 for 6 and 12 h, the mitotic index was increased by GP4 and reduced by GP7 and etoposide. According to flow cytometric BrdU/DNA anal., GP4 slightly retarded S phase and mainly whereas GP7 similar to etoposide induced cells accumulated at S phase and retarded the cells in G2 phase. Conclusion: GP4 and GP7 inhibit the proliferation of Molt 4B cells, but the mechanisms are different.

IT 125670-69-1, GP 7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effects of spin labeled derivs. of podophyllotoxin on cell cycle and macromol. synthesis in human lymphoid leukemia molt 4B cells)
RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.



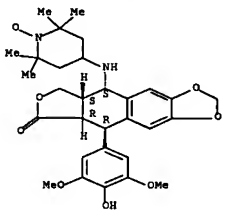
L9 ANSWER 16 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:599664 HCAPLUS Full-text
DOCUMENT NUMBER: 127:272355
TITLE: Comparison of antitumor activity of 4-[4''-(2'',2'',6'',6''-tetramethyl-1''-piperidinyloxy)amino]-1'-demethylepipodophyllotoxin (GP-7) with its free radical reduced products
AUTHOR(S): Zhang, Xiaowen; Jia, Zhengping; Meng, Fumin; Zhang, Peiyan; Tian, Xuan; Li, Jingxin
CORPORATE SOURCE: Department of Pharmacology, Institute of Tumor Research, Gansu Academy of Medical Science, Lanzhou, 730050, Peop. Rep. China
SOURCE: Zhongguo Yaolixue Tongbao (1997), 13(1), 28-30
CODEN: ZYTOE6; ISSN: 1001-1978

PUBLISHER: Anhui Yike Daxue Linchuan Yaoli Yanjiuso
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB The antitumor activity of the title compound (GP-7) and its free radical reduced products (GP-7-H, and GP-7-OH) were compared. At 5-10 mg kg-1, the inhibition rates of GP-7, GP-7-H and GP-7-OH on mouse transplanted tumor sarcoma 180(S180) were 38.7-46.8, 17.3-29.5 and 19.9-22.4%, resp. Similar results were obtained on solid carcinoma of ascitic hepatoma (Hepa). LD50 of 3 compds. were 231.2, 89.7 and 129.5 mg kg-1, resp. GP-7 had a more effective antitumor activity and a lower acute toxicity than that of GP-7-H and GP-7-OH. The results suggest that the free radical in GP-7 had an important role in increasing antitumor activity and decreasing toxicity.

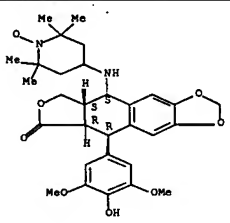
IT 125670-69-1, GP 7 125670-69-1D, derivs.
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antitumor activity of 4-[4''-(2'',2'',6'',6''-tetramethyl-1''-piperidinyloxy)amino]-1'-demethylepipodophyllotoxin (GP-7) with its free radical reduced products)
RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.

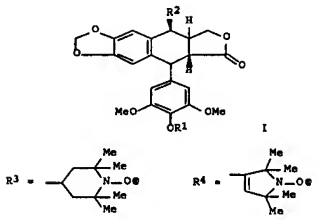


RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.



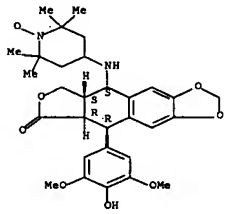
L9 ANSWER 17 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:457449 HCAPLUS Full-text
DOCUMENT NUMBER: 127:149030
TITLE: Syntheses and structure-activity relationship of podophyllotoxin derivatives as potential anticancer drugs
AUTHOR(S): Wang, Yan-Guang; Tao, Lan; Pan, Jian-Lin; Shi, Jian-Feng; Chen, Yao-Zu
CORPORATE SOURCE: Dep. Chem., Zhejiang University, Hangzhou, 310027, Peop. Rep. China
SOURCE: Gaodeng Xuexiao Huaxue Xuebao (1997), 18(7), 1061-1066
CODEN: KTHPDM; ISSN: 0251-0790
PUBLISHER: Gaodeng Jiaoyu Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
GI



AB Thirteen 4β-substituted podophyllotoxin derivs. I (R1 = H, Me; R2 = R3NH, R3O, R4CONH, 3,5-(NO2)2C6H3CONH, R4CO2, etc.) were prepared from podophyllotoxin or 4'-

demethylpodophyllotoxin and evaluated for antitumor activity against mouse leukemia P388 in vivo and human stomach carcinoma SGC-7901 in ivtro. Structure activity relationship was discussed. These results demonstrate the importance of 4'-phenolic hydroxyl group, and suggest further elaboration of 4β-nitrogen-containing substitution to simplify and optimize the structure of this class of anticancer compds.
IT 125670-69-1, GP-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(syntheses and structure-activity relationship of anticancer podophyllotoxin derivs.)
RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

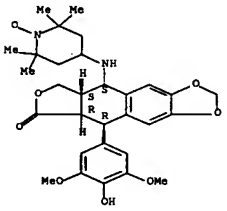
Absolute stereochemistry.



L9 ANSWER 18 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:422746 HCAPLUS Full-text
DOCUMENT NUMBER: 127:144745
TITLE: New spin labeled analogs of podophyllotoxin as potential antitumor agents
AUTHOR(S): Wang, Yan-guang; Pan, Jian-lin; Shi, Jian-feng; Chen, Yao-zu
CORPORATE SOURCE: Department Chemistry, Zhejiang University, Hangzhou, 310027, Peop. Rep. China
SOURCE: Life Sciences (1997), 61(5), 537-542
CODEN: LIFSAK; ISSN: 0024-3205
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Four new nitroxyl labeled derivs. of podophyllotoxin, 4-(2,2,6,6- tetramethyl-1-oxyl-4-piperidyl)oxy-epipodophyllotoxin, 4-(2,2,6,6-tetramethyl-1-oxyl-4-piperidyl)oxy-4'-demethylepipodophyllotoxin, 4-(2,2,5,5-tetramethyl-1-oxyl-3- pyrrolinyl)formyloxy-epipodophyllotoxin and 4-(2,2,5,5-tetramethyl-1-oxyl- 3-pyrrolinyl)formyloxy-4'-demethylepipodophyllotoxin, have been synthesized and evaluated for their antitumor activity in vitro. The 4'-demethyl-epipodophyllotoxins showed superior activity to the clin. used etoposide (VP-16) in their inhibition of leukemia P388, lung cancer A549 and stomach carcinoma SGC-7901 cells. The 4'-demethyl-epipodophyllotoxins was more active than the eipodophyllotoxins lacking a free phenolic hydroxyl group at C-4'.
IT 125670-69-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of new spin labeled analogs of podophyllotoxin as potential antitumor agents)
RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.



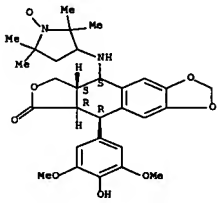
L9 ANSWER 19 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:225077 HCAPLUS Full-text
DOCUMENT NUMBER: 126:277327
TITLE: Synthesis of new Spin-labeled derivatives of podophyllotoxin as potential anticancer agents
AUTHOR(S): Pan, Jian Lin; Wang, Yan Guang; Shi, Jian; Chen, Yao Zu
CORPORATE SOURCE: Dep. Chem., Zhejiang Univ., Hangzhou, 310027, Peop. Rep. China
SOURCE: Chinese Chemical Letters (1997), 8(3), 207-208
CODEN: CCLEE7
PUBLISHER: Chinese Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Five new nitroxyl spin labeled podophyllotoxins e.g., I (R = Me, H) and II were synthesized via etherification of podophyllotoxin with III or via direct nucleophilic substitution with appropriate alkylamines. Two compds. were tested for their anticancer activity in vitro. The results showed that compound I (R = H) is much more potent than the clin. used etoposide (VP-16) in its inhibition of P388 cells, while compound I (R = Me) is not active.
IT 189001-22-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of new nitroxyl spin-labeled derivs. of podophyllotoxin as potential anticancer agents)
RN 189001-22-7 HCAPLUS
CN 1-Pyrrolidinyloxy, 3-[[5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-

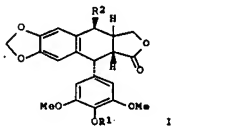
2,2,5,5-tetramethyl-, [5S-(5α,5aβ,8aα,9β)]-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 20 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:213086 HCAPLUS Full-text
DOCUMENT NUMBER: 126:238245
TITLE: Synthesis and antitumor activity of new derivatives of podophyllotoxin
AUTHOR(S): Pan, Jian-Lin; Wang, Yan-Guang; Chen, Yao-Zu
CORPORATE SOURCE: Department of Chemistry, Zhejiang University, Hangzhou, 310 027, Peop. Rep. China
SOURCE: Current Science (1997), 72(4), 268-271
CODEN: CUSCAM; ISSN: 0011-3891
PUBLISHER: Current Science Association
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



AB A series of new podophyllotoxin derivs. I [R1 = H, R2 = NHCOC6H4OAc-2, 2-benzothiazolylamino; R1 = H, Me, R2 = O2CC6H4OAc-2, 2- benzothiazolylthio] were synthesized and evaluated for their antitumor activity in vitro. I [R1 = H, R2 = NHCOC6H4OAc-2, 2-benzothiazolylamino] exhibited comparable or superior activity to clin.

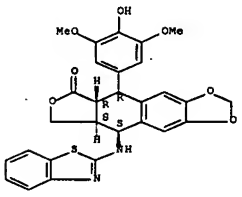
used etoposide in their inhibition of human stomach carcinoma SGC-7901, lung cancer A 549, and mouse leukemia P388 cells.

IT 188566-25-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antitumor activity of podophyllotoxin derivs.)

RN 188566-25-8 HCAPLUS

CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(2-benzothiazolylamino)-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, [5R-(5α,5aβ,8aα,9β)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 21 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1997:54908 HCAPLUS Full-text
DOCUMENT NUMBER: 126:157259
TITLE: Study on the synthetic method of spin labeling anticancer drug GP-7
AUTHOR(S): Yang, Weidong; Wu, Anxin
CORPORATE SOURCE: Dep. Pharmacol., Lanzhou Med. Coll., Lanzhou, 730000, Peop. Rep. China
SOURCE: Zhongguo Yaowu Huaxue Zazhi (1996), 6(3), 210-213
CODEN: ZYHZEP; ISSN: 1005-0108
PUBLISHER: Zhongguo Yaowu Huaxue Zazhi Bianjibu
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

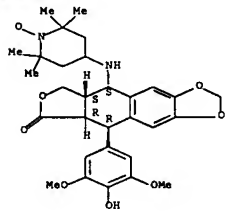
AB A new method of synthesis of intermediate product 2,2,6,6-tetramethyl-1- piperidinyloxy-4-amino free radical and final product GP-7 (podophyllotoxin derivative) was described, which has a mild reaction condition and good yield (32.5%).

IT 125670-69-1P, GP-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(study on synthetic method of spin labeling anticancer drug GP-7)

RN 125670-69-1 HCAPLUS

CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 22 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:240728 HCAPLUS Full-text
DOCUMENT NUMBER: 124:331692
TITLE: Activities of novel nonglycosidic epipodophyllotoxins in etoposide-sensitive and -resistant variants of human KB cells, P-388 cells, and in vivo multidrug-resistant murine leukemia cells
AUTHOR(S): Anyanwutaku, Innocent O.; Guo, Xin; Chen, Hong-Xing; Ji, Zheng; Lee, Kuo-Hsiung; Cheng, Yung-Chi
CORPORATE SOURCE: Department Pharmacology, Yale University School Medicine, New Haven, CT, 06520, USA
SOURCE: Molecular Pharmacology (1996), 49(4), 721-6
CODEN: MOPMA3; ISSN: 0026-895X
PUBLISHER: Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

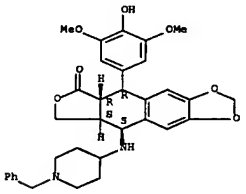
AB Previous structure-activity studies of the antitumor compound etoposide (VP-16) have suggested that replacement of the glycoside moiety could afford therapeutically active analogs with different biochem. determinants for cellular accumulation and drug resistance. In the present report, 10 analogs of VP-16 in which the glycosidyl moiety was replaced with alkyl or arylamino substituents exhibited 5-10-fold better binding affinity for topoisomerase II/DNA complex in human KB cells. A similar increase in the binding affinity was observed in an isolated-nuclei model. The analogs displayed greater or comparable potency to VP-16 in cell growth-inhibition studies and were less affected by cell membrane-associated drug resistance mechanisms, as exemplified by overexpression of P-glycoprotein multidrug-resistance gene or multidrug resistance-associated protein. Interestingly, in animal studies, analogs least affected by the membrane transport-deficiency phenotypes exhibited low therapeutic index values, thus suggesting that highly efficient modulation of cellular membrane transport defects could perturb the selectivity of antitumor agents for cancer cells. This report also suggests a new method of quantifying drug-induced protein-linked DNA breaks by graphically determining the apparent dissociation-inhibition constant (Kdi) for the inhibitors.

IT 152833-13-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antitumor activities of novel nonglycosidic epipodophyllotoxins in sensitive and resistant human and laboratory animal cells in relation to topoisomerase II/DNA complex binding and structure)

RN 152833-13-1 HCAPLUS

CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[1-(phenylmethyl)-4-piperidinyl]amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 23 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:148263 HCAPLUS Full-text
DOCUMENT NUMBER: 124:249647
TITLE: Antitumor Agents. 163. Three-dimensional quantitative structure-activity relationship study of 4'-O-demethylepipodophyllotoxin analogs using the CoMFA/q2-GRS approach
AUTHOR(S): Cho, Sung Jin; Tropsha, Alexander; Suffness, Matthew; Cheng, Yung-Chi; Lee, Kuo-Hsiung
CORPORATE SOURCE: School of Pharmacy, University of North Carolina, Chapel Hill, NC, 27599, USA
SOURCE: Journal of Medicinal Chemistry (1996), 39(7), 1383-95
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

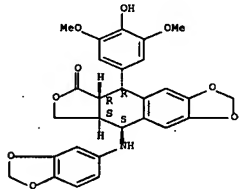
AB Analogs of 4'-O-demethylepipodophyllotoxin are considered as potential anticancer agents. The authors have applied comparative mol. field anal. (CoMFA) and a novel CoMFA/q2-GRS technique recently developed in the group to identify the essential structural requirements for increasing the ability of these compds. to form cellular protein-DNA complex. In addition, a new method to incorporate different types of probe atoms as part of q2-GRS routine has been developed. The best final model with 101 compds. using a combination of four different sets of probe atoms and charges [C (sp3, +1), C (sp3, 0), H (+1), and O (sp3, -1)] yielded a q2 of 0.584 and the standard error of prediction of 0.660 at 5 principal components. The steric and electrostatic contour plots of the final model were compared with the DNA phosphate backbone environment of the DNA-4'-O-demethylepipodophyllotoxin analog complex, which was generated using the x-ray structure of the DNA-nogalamycin complex. The comparison reveals that the CoMFA steric and electrostatic fields are compatible with stereochem. properties of the DNA backbone. The results obtained from this study shall guide the future synthetic efforts.

IT 127882-68-2 127882-69-3 127882-75-1
127882-76-2 127882-77-3 152833-13-1
152833-17-5 152886-04-9 152886-08-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(3-dimensional QSAR study of 4'-O-demethylepipodophyllotoxin analogs as antitumor agents using CoMFA/q2-GRS approach)

RN 127882-68-2 HCAPLUS

CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(1,3-benzodioxol-5-ylamino)-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

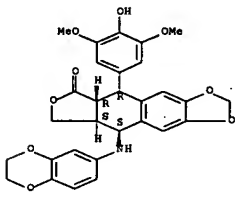
Absolute stereochemistry.



RN 127882-69-3 HCAPLUS

CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(2,3-dihydro-1,4-benzodioxin-6-yl)amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

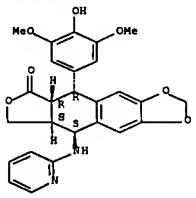
Absolute stereochemistry.



RN 127882-75-1 HCAPLUS

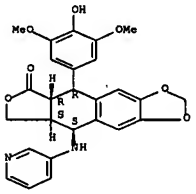
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(2-pyridinylamino)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



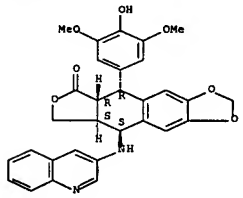
RN 127882-76-2 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-pyridinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



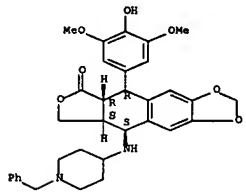
RN 127882-77-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-quinolinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



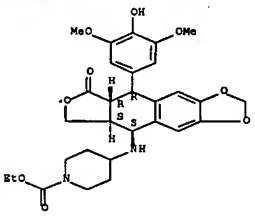
RN 152833-13-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[1-(phenylmethyl)-4-piperidinyl]amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



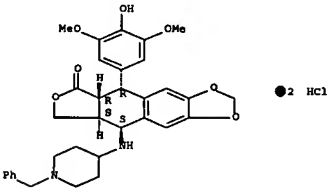
RN 152833-17-5 HCAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



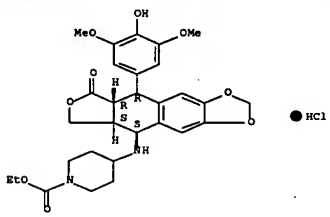
RN 152886-04-9 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[1-(phenylmethyl)-4-piperidinyl]amino]-, dihydrochloride, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 152886-08-3 HCAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester, monohydrochloride, [5S-(5α,5aβ,8aα,9β)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



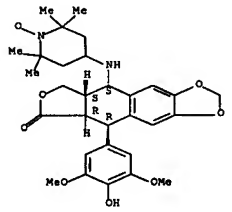
L9 ANSWER 24 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1996:36218 HCAPLUS Full-text
DOCUMENT NUMBER: 124:105448
TITLE: HPLC determination of 4-[4"-(2", 2", 6", 6"-tetramethyl-1"-piperidinyloxy)amino]-4'-demethylepipodophyllotoxin in rat plasma and studies of its pharmacokinetics
AUTHOR(S): Jia, Z. P.; Xu, L. T.; Wang, D. M.; Xie, J. W.
CORPORATE SOURCE: Dep. Pharmacy, PLA Lanzhou General Hosp., Lanzhou, 730050, Peop. Rep. China
SOURCE: Yaoxue Xuebao (1995), 30(10), 768-72
CODEN: YHHPAL; ISSN: 0513-4870
PUBLISHER: Chinese Academy of Medical Sciences, Institute of Materia Media
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB 4-[4"-(2",2",6",6"-Tetramethyl-1"-piperidinyloxy) amino]-4'- demethylepipodophyllotoxin (GP-7) is a new podophyllotoxin spin-labeled derivative Its primary effect is the antitumor activity on transplanted mouse tumors and cultured tumor cells. This paper describes a method for its determination using HPLC with UV detection and the determination of its pharmacokinetic parameters in rats. A Shimadzu LC-6A liquid chromatog. equipped with a Shimadzu SPD-6AV multiwavelength detector and a Chromatopac C-R3A data processor was used. The separation was performed on a Zorbax-ODS column (5 μm, 4.6 mm × 150 mm) with a mobile phase of methanol-water- glacial acetic acid (59:41 : 0.6). The flow-rate was 1.0 mL.min-1 and detection was made at 285 nm. A plasma specimen (0.2 mL) was spiked with 22.6 μg.mL-1 internal standard (podophyllic acid piperidinyl hydrazone nitroxide radical, GP-1) and extracted with ether-dichloromethane (3:1). The extract was evaporated at 45C. The residue was taken up with 0.1 mL of the mobile phase and 20 μl aliquots were injected into the system. The calibration curve was linear in the range from 2 to 200 μg.mL-1 with r = 0.9997. The detection limit was 0.2 μg.mL-1 and the recovery of GP-7 from rat plasma was 94.3% .apprx. 100.9%. The relative standard deviations for within- day and between- day were 2.29% .apprx. 4.64% and 5.55% .apprx. 7.70%, resp. After i.v. injection of GP-7 10, 20 and 30 mg.kg-1, the concns. of the drug in rat plasma were determined The pharmacokinetic parameters of GP-7 were obtained by using MCPKP program on a COMPAC-486 computer. The data obtained fitted a two-compartment open model, and the mean T1/2β value was 39.8 min.

IT 125670-69-1, GP-7
RL: ANT (Analyte); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process)
(HPLC determination of 4-[4"-(2", 2", 6", 6"-tetramethyl-1"-piperidinyloxy)amino]-4'-demethylepipodophyllotoxin in rat plasma and studies of its pharmacokinetics)

RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

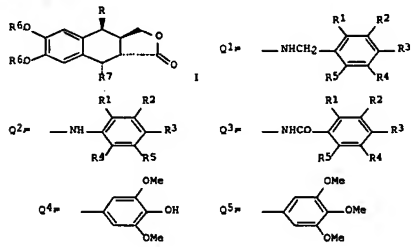
Absolute stereochemistry.



L9 ANSWER 25 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:652234 HCAPLUS Full-text
DOCUMENT NUMBER: 123:55857
TITLE: Preparation of etoposide analogs as topoisomerase II inhibitors.
INVENTOR(S): Lee, Kuo-Hsiung; Zhou, Xiao-Ming; Wang, Zhe-Qing; Chang, Jang-Yang; Chen, Hong-Xing; Cheng, Yung-Chi; Shen, Ya-Ching; Han, Fu-Shen; Hu, Hong; Zhang, Yi-Lin
PATENT ASSIGNEE(S): University of North Carolina, USA
SOURCE: U.S., 22 pp. Cont.-in-part of U.S. 5,132,322.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

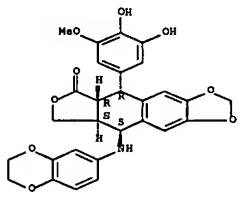
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5332811	A	19940726	US 1991-693300	19910501
US 5132322	A	19920721	US 1989-406330	19890912
CA 2044211	A1	19921211	CA 1991-2044211	19910610
PRIORITY APPLN. INFO.:			US 1989-406330 A2	19890912
			US 1989-313826 B2	19890223

OTHER SOURCE(S): MARPAT 123:55857
GI



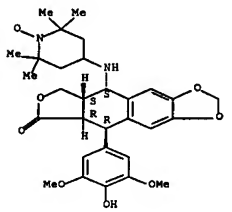
AB Title compds. [I; R = Q1-Q3; R1-R5 = H, Me, Et, n-Pr, i-Pr, Bu, CF3, OMe, OEt, OPr, OBu, OPr-i, OBu-i, OCH2O, OCH2CH2O, CH2 OH, CH2CH2OH, CH2Cl, CH2CH2Cl, CH2F, CH2CH2F, CH2OMe, Ac, COEt, CO2Me, CO2Et, NO2, NH2, NH2.HCl, NH2.HAc, NH2.HAc, NH2.1/2H2SO4, NH2.1/3H3PO4, NMe2, NEt2, OH, CN, N3, SO2H, SO2NH2, SO2Cl, (substituted) Ph, PhO, anilinyl, cyclohexyl, piperidinyl, morpholinyl, piperazinyl, N-methylpiperazinyl; R6 = H, Me, Et, Pr, Pr-i, Bu, bridged methylene; R7 = Q4, Q5, etc.], were prepared Thus, 4'-O-demethylepipodophyllotoxin was stirred with NaN3 and CF3CO2H in CHCl3 to give 94% 4'-O-demethyl-4β-azido-4-deoxypodophyllotoxin. This was hydrogenated in EtOAc over Pd/C to give 70% 4'-O-demethyl-4β- amino-4-deoxypodophyllotoxin. Treatment of the product with PhCH2Br and NaI in acetone gave 4'-O-demethyl-4β-benzylamino-4- deoxypodophyllotoxin. The latter inhibited DNA topoisomerase II with ID50 = 25 μM.
IT 147199-62-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as topoisomerase II inhibitor)
RN 147199-62-0 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(2,3-dihydro-1,4-benzodioxin-6-yl)amino]-5-(3,4-dihydroxy-5-methoxyphenyl)-5,8,8a,9-tetrahydro-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L9 ANSWER 26 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1995:569862 HCAPLUS Full-text
DOCUMENT NUMBER: 122:305829
TITLE: Pharmacokinetics of 4-[4''-(2'',2'',6'',6''-tetramethyl-1''-piperidinyloxy)amino]-4'-demethylepipodophyllotoxin in mice bearing sarcoma 180
AUTHOR(S): Jia, Zheng-Ping; Xie, Jing-Wen; Xie, Ting-Quan
CORPORATE SOURCE: Dep. of Pharmacy, Lanzhou General Hospital, Lanzhou, 730050, Peop. Rep. China
SOURCE: Zhongguo Yaoli Xuebao (1995), 16(3), 197-200
CODEN: CYLPDN; ISSN: 0253-9756
PUBLISHER: Kexue
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The pharmacokinetics of 4-[4''-(2'',2'',6'',6''-tetramethyl-1''- piperidinyloxy)amino]-4'-demethylepipodophyllotoxin (GP-7) was studied in mice bearing sarcoma 180. The plasma concentration-time course of GP-7 in mice was best fitted to a 2-compartment open model after i.v. 20, 60 mg.kg-1. At both doses the plasma T 1/2β was around 40 min. The highest concentration was found in liver and lung. The level of GP-7 was higher in tumor than in kidney, spleen, and bond marrow after i.p. 20 mg.kg-1 for 10 d. Urinary excretion of GP-7 as unchanged drug accounted for about 20% of the administered doses 72 h after injection. GP-7 disappeared more slowly from the plasma of mice bearing sarcoma 180, distributed extensively over the tissues and was partially excreted from urine. The concentration of GP-7 in tumor was higher.
IT 125670-69-1, GP-7
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(pharmacokinetics of [(tetramethylpiperidinyloxy)amino]demethylepipodophyllotoxin in mice bearing sarcoma 180)
RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.

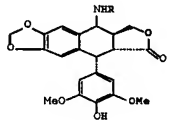


L9 ANSWER 27 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:426886 HCAPLUS Full-text
DOCUMENT NUMBER: 121:26886
TITLE: 4β-amino podophyllotoxin analog compounds for treating tumors and methods of synthesis and use
INVENTOR(S): Lee, Kuo Hsiung; Cheng, Yung Chi; Zhang, Yi Lin

PATENT ASSIGNEE(S): University of North Carolina at Chapel Hill, USA; Yale University
SOURCE: U.S., 24 pp. Cont.-in-part of U.S. Ser. No. 874,345.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

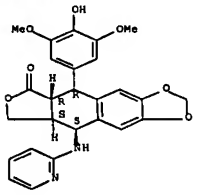
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5300500	A	19940405	US 1992-987765	19921208
US 5132322	A	19920721	US 1989-406330	19890912
WO 9322319	A1	19931111	WO 1993-US3830	19930423
W: AT, AU, BB, BG, BR, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9341136	A	19931129	AU 1993-41136	19930423
US 5541223	A	19960730	US 1993-145382	19931028
PRIORITY APPLN. INFO.:			US 1989-313826	B1 19890223
			US 1989-406330	A1 19890912
			US 1992-874345	A2 19920424
			US 1992-944472	A 19920914
			US 1992-987765	A2 19921208
			WO 1993-US3830	A 19930423

OTHER SOURCE(S): MARPAT 121:26886
GI



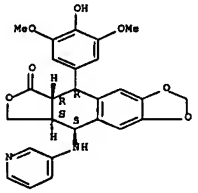
AB Podophyllotoxin compds. I (R = 1-piperidinylethylamino, 4-morpholinylethylamino, etc.) and their use in treating tumors are disclosed. I [R = (CH2)3N(Me)2], prepared from 4'-O-demethyl-4β-bromo- 4-desoxypodophyllotoxin, inhibited human DNA topoisomerase II (from peripheral blast cells of a patient with acute leukemia) and promoted cellular protein-DNA complex formation.
IT 127882-75-1P 127882-76-2P 127882-77-3P
152386-04-9P 155157-47-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of and DNA topoisomerase II activity inhibition by and cellular protein-DNA complex formation promotion by)
RN 127882-75-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(2-pyridinylamino)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



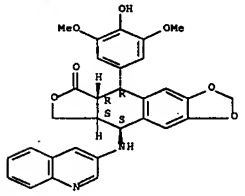
RN 127882-76-2 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-pyridinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



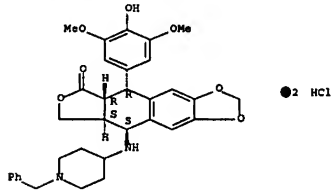
RN 127882-77-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-quinolinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



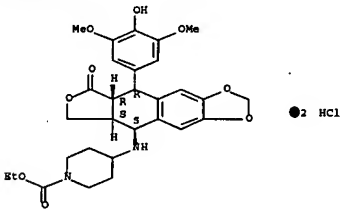
RN 152886-04-9 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[(1-(phenylmethyl)-4-piperidinyl]amino]-, dihydrochloride, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



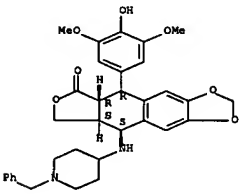
RN 155157-47-4 HCAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



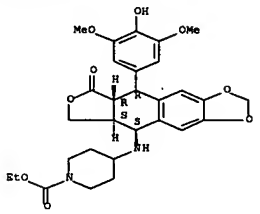
IT 152833-13-1P 152833-17-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as neoplasm inhibitor)
RN 152833-13-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[1-(phenylmethyl)-4-piperidinyl]amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 152833-17-5 HCAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

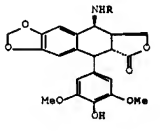
Absolute stereochemistry.



L9 ANSWER 28 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:323095 HCAPLUS Full-text
DOCUMENT NUMBER: 120:323095
TITLE: Preparation of 4-β-aminopodophyllotoxin derivatives as antitumor agents
INVENTOR(S): Lee, Kuo Hsiung; Cheng, Yung Chi
PATENT ASSIGNEE(S): University of North Carolina, USA
SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9322319	A1	19931111	WO 1993-US3830	19930423
W: AT, AU, BB, BG, BR, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5300500	A	19940405	US 1992-987765	19921208
AU 9341136	A	19931129	AU 1993-41136	19930423
PRIORITY APPLN. INFO.:			US 1992-874345 A	19920424
			US 1992-944472 A	19920914
			US 1992-987765 A2	19921208
			US 1989-313826 B1	19890223
			US 1989-406330 A1	19890912
			WO 1993-US3830 A	19930423

OTHER SOURCE(S): MARPAT 120:323095
GI

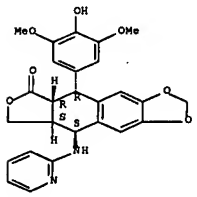


AB Title compds. I [R = R2R1N(CH2)n wherein R1, R2 = H, alkyl, pyrrolidyl, piperidyl, morpholino, 2-oxopyrrolidyl, etc., n = 2-4], are prepared 4'-O-demethylepipodophyllotoxin was brominated to give the 4β-bromo derivative to which was added 4-benzyl-1-piperidinamine to give I (R = 4-benzylpiperidino) (II). In a cytotoxicity test with KB strains the ID50 of II was <0.4 μM.

IT 127882-75-1P 127882-76-2P 127882-77-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

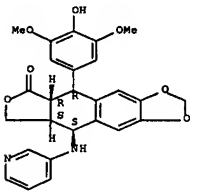
RN 127882-75-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(2-pyridinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 127882-76-2 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-pyridinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

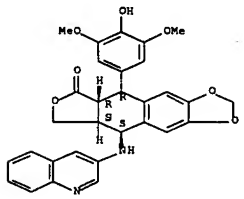
Absolute stereochemistry. Rotation (-).



RN 127882-77-3 HCAPLUS

CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-quinolinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

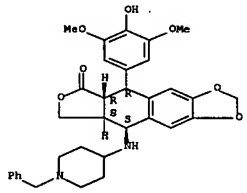
Absolute stereochemistry. Rotation (-).



IT 152833-13-1P 152833-17-5P 152886-04-9P
155157-47-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of, as antitumor agent)

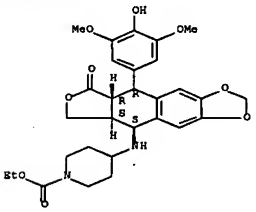
RN 152833-13-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[1-(phenylmethyl)-4-piperidinyl]amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



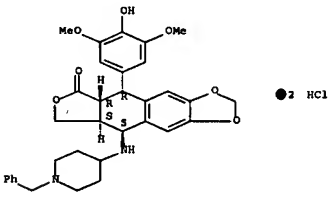
RN 152833-17-5 HCAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



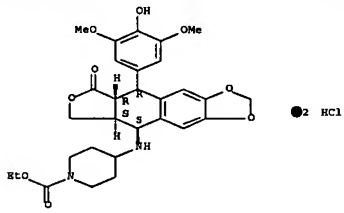
RN 152886-04-9 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[1-(phenylmethyl)-4-piperidinyl]amino]-, dihydrochloride, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

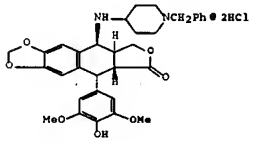


RN 155157-47-4 HCAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 29 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1994:124146 HCAPLUS Full-text
DOCUMENT NUMBER: 120:124146
TITLE: Antitumor Agents. 148. Synthesis and Biological Evaluation of Novel 4β-Amino Derivatives of Etoposide with Better Pharmacological Profiles
AUTHOR(S): Zhang, Yi Lin; Guo, Xin; Cheng, Yung Chi; Lee, Kuo Hsiung
CORPORATE SOURCE: Natural Products Laboratory, University of North Carolina, Chapel Hill, NC, 27599, USA
SOURCE: Journal of Medicinal Chemistry (1994), 37(4), 446-52
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



II

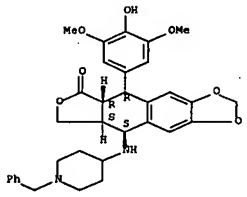
AB A series of novel 4β-amino derivs. of etoposide (I), which can form water-soluble salts and demonstrate excellent activity against mdr- and topo II-resistant cell lines, have been synthesized. Compared with etoposide, a number of the compds. show comparable or greater inhibition of human DNA topo II. In a cellular protein-DNA complex formation assay, a number of the compds. are more potent than I. A dose-response study of II shows that it is 20 times more active in formation of protein-linked DNA breaks than I. Furthermore, both II and its free base were found to be highly active toward I-resistant KB cell lines. All compds. were also evaluated in vitro against a total of 56 human tumor cell lines derived from seven cancer types. Comparison of the log10 G150 mean graph

midpoints of the compds. (-4.89 to -7.30) with that of I (-4.08) shows these new analogs to be 6-1659-fold more active than I.

IT 152833-13-1P 152833-17-5P 152886-04-9P 152886-08-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and antitumor activity of)

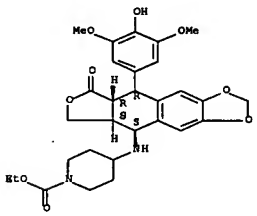
RN 152833-13-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[1-(phenylmethyl)-4-piperidinyl]amino]-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



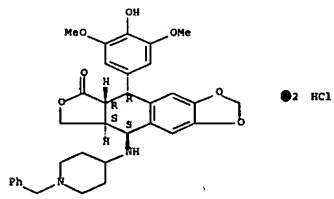
RN 152833-17-5 HCAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



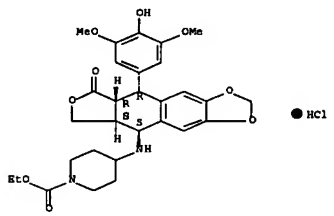
RN 152886-04-9 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-[[1-(phenylmethyl)-4-piperidinyl]amino]-, dihydrochloride, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 152886-08-3 HCAPLUS
CN 1-Piperidinecarboxylic acid, 4-[[5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-, ethyl ester, monohydrochloride, [5S-(5α,5aβ,8aα,9β)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



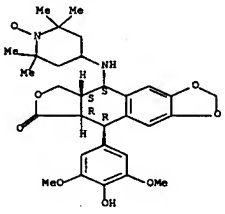
L9 ANSWER 30 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:459328 HCAPLUS Full-text
DOCUMENT NUMBER: 119:59328
TITLE: Multilevel registered polymeric Mach-Zehnder intensity modulator array
AUTHOR(S): Tumolillo, Thomas A., Jr.; Ashley, Paul R.
CORPORATE SOURCE: Res. Dev. Eng. Cent., Natl. Res. Counc. Res. Assoc., AL, 35898-5248, USA
SOURCE: Applied Physics Letters (1993), 62(24), 3068-70
CODEN: APPLAB; ISSN: 0003-6951
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The first known demonstration is described of a registered two level guided wave polymeric electrooptic Mach-Zehnder intensity modulator array. The device consists of two complete vertically stacked levels. Both levels were independently poled and operated. There was

no measurable optical or elec. cross talk due to a high resistivity thermosat polymer buffers layer employed. Fabrication and performance of the device is discussed.

IT 125670-69-1, GP7
RL: USES (Uses)
(electrooptical Mach-Zehnder intensity modulator using)

RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.

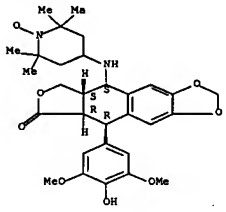


L9 ANSWER 31 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:440510 HCAPLUS Full-text
DOCUMENT NUMBER: 119:40510
TITLE: Effects of 4-[4''-(2'',2'',6'',6''-tetramethyl-1''-piperidinyloxy)amino]-4'-demethylepipodophyllotoxin on immune function in mice
AUTHOR(S): Jia, Zhengping; Xie, Jingwen; Feng, Pu; Niu, Jiguo
CORPORATE SOURCE: Dep. Pharm., PLA Lanzhou Gen. Hosp., Lanzhou, 730050, Peop. Rep. China
SOURCE: Zhongguo Yaoli Xuebao (1993), 14(3), 221-4
CODEN: CYLPDN; ISSN: 0253-9756
DOCUMENT TYPE: Journal
LANGUAGE: English
AB 4-[4''-(2'',2'',6'',6''-Tetramethyl-1''-piperidinyloxy)amino]-4'-demethylepipodophyllotoxin (GP-7) 10-40 mg · kg-1 i.p. daily for 7 days reduced the specific antibody formation of splenocytes, serum agglutinin titer, and hemolysin HC50 in mice immunized with SRBC. GP-7 inhibited the footpad delayed hypersensitivity reaction and decreased the wts. of spleen and thymus, but did not affect the phagocytic function of the peritoneal macrophages. In vitro the proliferation of mouse splenic lymphocytes activated by Con A was markedly inhibited by GP-7 in a concentration-dependent manner. At concns. of 0.05-5 mg · L-1, the inhibition rates were 24-96%. These results suggested that GP-7 was an immunosuppressive agent.

IT 125670-69-1, GP 7
RL: PROC (Process)
(immunosuppressive action of)

RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.

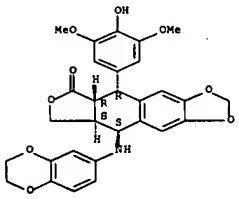


L9 ANSWER 32 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:204718 HCAPLUS Full-text
DOCUMENT NUMBER: 118:204718
TITLE: Antitumor agents 126. Novel 4β-substituted anilino derivatives of 3'4'-O,O-didemethylpodophyllotoxin as potent inhibitors of human DNA topoisomerase II
AUTHOR(S): Wang, Zhe Qing; Shen, Ya Ching; Chen, Hong Xing; Chang, Jang Yang; Guo, Xin; Cheng, Yung Chi; Lee, Kuo Hsiung
CORPORATE SOURCE: Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27599, USA
SOURCE: Pharmaceutical Research (1993), 10(3), 343-50
CODEN: PHREEB; ISSN: 0724-8741
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A series of derivs. of 3',4'-O,O-didemethylpodophyllotoxin were synthesized and evaluated for their inhibitor activity against neoplastic cell growth (KB) and against human DNA topoisomerase II as well as for their activity in causing cellular protein-linked DNA breakage. The compds. possessing a 4β-anilino moiety either unsubstituted or substituted at the para (F, CO2Me, COMe, CN, CH2CN, NO2) or meta (OH) positions or with an ethylenedioxy moiety showed the same or greater activity than etoposide in causing cellular protein-linked DNA breakage and in inhibiting DNA topoisomerase II. However, compared to the corresponding 4'-O-demethyl analogs, the 3',4'-O,O-didemethyl compds. have a similar potency in inhibition of DNA topoisomerase II but are less active in causing cellular protein-linked DNA breakage. Complete correlation between the 3 biol. activities - cytotoxicity, inhibition of DNA topoisomerase II, and induction of protein-linked DNA breakage - was also not observed This supports the possibility that the biol. determinants of action among these compds. may be different.

IT 127882-69-3
RL: BIOL (Biological study)
(antitumor activity and DNA topoisomerase II inhibitory activity of, structure in relation to)

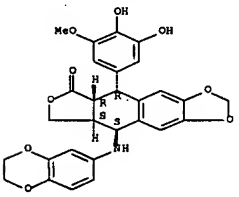
RN 127882-69-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(2,3-dihydro-1,4-benzodioxin-6-yl)amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 147199-62-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and antitumor activity and DNA topoisomerase II inhibitory activity of, structure in relation to)
RN 147199-62-0 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(2,3-dihydro-1,4-benzodioxin-6-yl)amino]-5-(3,4-dihydroxy-5-methoxyphenyl)-5,8,8a,9-tetrahydro-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

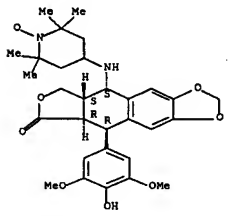
Absolute stereochemistry. Rotation (-).



L9 ANSWER 33 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:523995 HCAPLUS Full-text
DOCUMENT NUMBER: 117:123995
TITLE: Circular dichroism of spin-labeled derivatives of podophyllotoxin
AUTHOR(S): Tian, Xuan; Li, Jingxin; Chen, Yaozu
CORPORATE SOURCE: Natl. Lab. Appl. Org. Chem., Lanzhou Univ., Lanzhou, 730000, Peop. Rep. China
SOURCE: Gaodeng Xuexiao Huaxue Xuebao (1992), 13(3), 349-51
CODEN: KTHPDM; ISSN: 0251-0790
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The CD spectra of 10 spin-labeled derivs. of podophyllotoxin were studied with CD rule of 1-aryl tetralin compds. and Snatzke's sphere rule. The relationship between the first couple and stereoconfiguration and antitumor activity of these compds. were discussed.
IT 125670-69-1

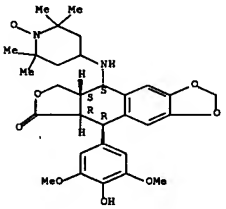
RL: BIOL (Biological study)
(CD of spin-labeled, antitumor activity and structure relationship of)
RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.

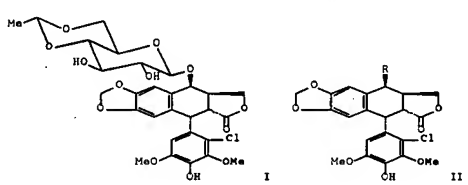


L9 ANSWER 34 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:400467 HCAPLUS Full-text
DOCUMENT NUMBER: 117:467
TITLE: Effects of 4-(4''-(2'',2'',6'',6''-tetramethyl-1''-piperidinyloxy)amino)-4'-demethylepipodophyllotoxin on nucleic acids, proteins, and DNA strand of L7712 cells in vitro
AUTHOR(S): He, Xiaoqing; Zhang, Peiyan; Tian, Xuan; Li, Jinxin
CORPORATE SOURCE: Dep. Pharmacol., Lanzhou Med. Coll., Lanzhou, 730000, Peop. Rep. China
SOURCE: Zhongguo Yaoli Xuebao (1992), 13(3), 276-9
CODEN: CYLPDN; ISSN: 0253-9756
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The antitumor activity of GP-7, a new spin-labeled epipodophyllotoxin, was studied by liquid scintillation spectrometry. There were many similarities between GP-7 and etoposide. Both GP-7 and etoposide inhibited the incorporation of [3H]thymidine, [3H]uridine, and [3H]lencine into DNA, RNA, and protein synthesis in leukemia 7712 cells. The inhibition correlated with drug concentration and time. IC50 of GP-7 and etoposide on DNA synthesis at 24 h were 0.21 and 0.37 μg·mL-1, resp. The inhibition of GP-7 or etoposide on DNA synthesis retained even after the drug were washed out for 3 h. GP-7 and etoposide caused DNA single-strand breaks, with a well concentration-response relationship. These data suggest that the inhibition of DNA synthesis by GP-7 or etoposide is likely due to the damage of DNA template and breaking of single-strand DNA.
IT 125670-69-1, GP 7
RL: BIOL (Biological study)
(DNA and RNA and protein formation inhibition by, DNA strand break induction in, in leukemia cells)
RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.



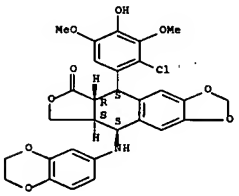
L9 ANSWER 35 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1992:128476 HCAPLUS Full-text
DOCUMENT NUMBER: 116:128476
TITLE: Antitumor agents. 123. Synthesis and human DNA topoisomerase II inhibitory activity of 2'-chloro derivatives of etoposide and 4β-(arylamino)-4'-O-demethylpodophyllotoxins
AUTHOR(S): Hu, Hong; Liu, Su Ying; Cheng, Yung Chi; Lee, Kuo Heiung; Wang, Zhe Qing
CORPORATE SOURCE: Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27599, USA
SOURCE: Journal of Medicinal Chemistry (1992), 35(5), 866-71
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 116:128476
GI



AB The title compds. I and II (e.g. R = OH, R = NHC6H4R1; R1 = 3-, 4-NO2, 3-OH, 4-F, 4-Cl, 4-Br) were prepared and evaluated for their inhibitory activity against the human DNA topoisomerase II as well as for their activity in causing cellular protein-linked DNA breakage. The results showed that none of these compds. are active as a result of the C-

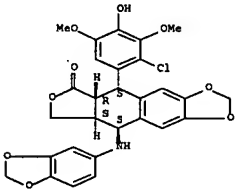
2' chloro substitution on ring E. This would suggest that the free rotation of ring E is essential for the aforementioned enzyme inhibitory activity. In addition, these 2'-chloro derivs. showed no significant cytotoxicity.
IT 138261-36-6P 138261-37-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and DNA topoisomerase inhibitory activity of)
RN 138261-36-6 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(2,3-dihydro-1,4-benzodioxin-6-yl)amino]-5-(2-chloro-4-hydroxy-3,5-dimethoxyphenyl)-5,8,8a,9-tetrahydro-, [5S-(5α,5aβ,8aα,9β)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 138261-37-7 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(1,3-benzodioxol-5-ylamino)-5-(2-chloro-4-hydroxy-3,5-dimethoxyphenyl)-5,8,8a,9-tetrahydro-, [5S-(5α,5aβ,8aα,9β)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 36 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:421725 HCAPLUS Full-text
DOCUMENT NUMBER: 115:21725
TITLE: Effect of 4β-arylamino derivatives of 4'-O-demethylepipodophyllotoxin on human DNA

topoisomerase II, tubulin polymerization, KB cells, and their resistant variants

AUTHOR(S): Chang, Jang Yang; Han, Fu Sheng; Liu, Su Ying; Wang, Zhe Qing; Lee, Kuo Hsiung; Cheng, Yung Chi

CORPORATE SOURCE: Sch. Med., Yale Univ., New Haven, CT, 06510, USA

SOURCE: Cancer Research (1991), 51(7), 1755-9
CODEN: CNREA8; ISSN: 0008-5472

DOCUMENT TYPE: Journal

LANGUAGE: English

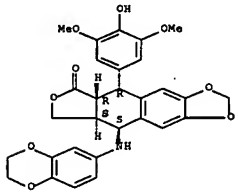
AB Six 4β-arylamino derivs. of 4'-O-demethylepipodophyllotoxin were examined for inhibitory activity against human DNA topoisomerase II and tubulin polymerization, their ability to generate protein-linked DNA breaks in cells, and their cytotoxicity toward the KB cell line and its VP-16- and vincristine-resistant variants. Five of these derivs. were 5-10-fold more potent than VP-16 as inhibitors of DNA topoisomerase II in vitro, and all of these derivs. could generate the same amount or more protein-linked DNA breaks in cells than VP-16 at 1-20 μM. Tubulin polymerization was inhibited by these compds. to different degrees. The analogs were cytotoxic not only to KB cells but also for their VP-16-resistant and vincristine-resistant variants which showed decrease cellular uptake of VP-16 and a decrease in DNA topoisomerase II content or overexpression of MDR1 phenotype. These characteristics may cause these derivs. to have different spectrums of antitumor activity.

IT 127882-69-3
RL: BIOL (Biological study)
(DNA topoisomerase II and tubulin polymerization inhibition by, antitumor activity in relation to)

RN 127882-69-3 HCAPLUS

CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(2,3-dihydro-1,4-benzodioxin-6-yl)amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 37 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:178003 HCAPLUS Full-text

DOCUMENT NUMBER: 114:178003

TITLE: Effects of 4-[4''-(2'',2'',6'',6''-tetramethyl-1''-piperidinyloxy)amino]-4'-demethylepipodophyllotoxin on the proliferation, clonal formation and DNA synthesis of L1210 cells in vitro

AUTHOR(S): Jia, Zhengping; Zhang, Peiyan; Liang, Zhongdong

CORPORATE SOURCE: Dep. Clin. Pharmacol., Gen. Hosp., Lanzhou, 730050, Peop. Rep. China

SOURCE: Zhongguo Yaolixue Yu Dulixue Zazhi (1991), 5(1), 47-9
CODEN: ZYYZEW; ISSN: 1000-3002

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

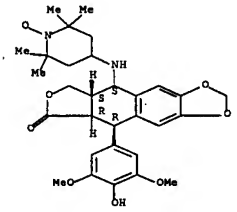
AB The effects of a new podophyllotoxin spin-labeled derivative, 4-[4''-(2'',2'',6'',6''-tetramethyl-1''-piperidinyloxy)amino]-4'- demethylepipodophyllotoxin (GP-7) on the proliferation, clonal formation and incorporation of [3H]TdR into DNA of L1210 cells in vitro were compared with those of VP-16. The proliferation of L1210 cells was markedly inhibited by GP-7 and the inhibition rate had a pos. corelation with the concentration and exposure time. At a concentration of 0.08-100 μmol/L, the inhibition rate was 18.4-80.7% and the IC50 was 1.51 μmol/L. After exposure of the cells to GP-7 μmol/L for 6, 12, 24 and 48 h, the inhibition rates were 21.7, 42.2, 60.6 and 81.2%, resp. The effect of GP-7 on the proliferation of L1210 cells was similar to that of VP-16. The clonal formation of L1210 cells was inhibited by GP-7 and VP-16 with IC50 values of 3.29 and 3.82 μmol/L, resp. After exposure to 0.08-100 μmol/L GP-7 for 24 h, the inhibition rate of the incorporation of [3H]TdR into DNA of L1210 cells was 21.4-81.2%. These results suggested that GP-7 had a similar remarkable antitumor activity as that of VP-16.

IT 125670-69-1, GP 7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antitumor activity of, as podophyllotoxin derivative)

RN 125670-69-1 HCAPLUS

CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 38 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1991:121866 HCAPLUS Full-text

DOCUMENT NUMBER: 114:121866

TITLE: Preparation of 4-deoxypodophyllotoxins as antitumor agents

INVENTOR(S): Lee, Kuo Hsiung; Wang, Zhe Qing; Cheng, Yung Chi; Liu, Su Ying; Imakura, Yasuhiro; Haruna, Mitsumasa; Beers, Scott A.; Thurston, Lee S.; Dai, Hua Juan; et al.

PATENT ASSIGNEE(S): University of North Carolina, USA

SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

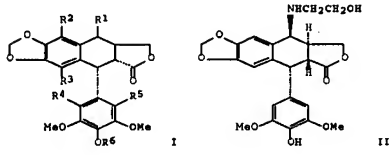
FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9009788	A1	19900907	WO 1990-US842	19900223
W: AU, CA, JP, KR				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
US 5132322	A	19920721	US 1989-406330	19890912
AU 9051571	A	19900926	AU 1990-51571	19900223
AU 632796	B2	19930114		
EP 461141	A1	19911218	EP 1990-903699	19900223
EP 461141	B1	19991103		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE				
AT 186302	T	19991115	AT 1990-903699	19900223
JP 3043602	B2	20000522	JP 1990-503787	19900223
PRIORITY APPLN. INFO.:			US 1989-313826 A	19890223
			US 1989-406330 A	19890912
			WO 1990-US842 A	19900223

OTHER SOURCE(S): MARPAT 114:121866

GI



I

II

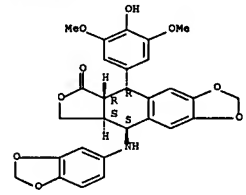
AB Title compds., etoposide analogs in which the glycosidic moiety is replaced, I (R1 = β-HOCH2CH2O, β-HOCH2CHMeNH, β-HOCHMeCH2NH, β-Cl, α- or β-HO, α- or β-H2n, β-HOCH2CH2NH, etc.; R1 = β-2-HO-, β-3-HO-, β-4-HOC6H4NH; R2-R5 = H, Br; R6 = H, Me) are prepared HBr was bubbled through a solution of podophyllotoxin in anhydrous CH2Cl2 at room temperature to give a product which was treated with BaCO3 and HOCH2CH2NH2 to give after 5 h at room temperature podophyllotoxin derivative II. In test for antitumor activity such as inhibitory activity on human type II DNA topoisomerase, formation of protein-linked DNA breakage, and cytotoxicity II and other I exceeded that of etoposide.

IT 127882-68-2P 127882-75-1P 127882-76-2P
127882-77-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of, as antitumor agent)

RN 127882-68-2 HCAPLUS

CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(1,3-benzodioxol-5-ylamino)-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

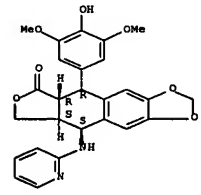
Absolute stereochemistry.



RN 127882-75-1 HCAPLUS

CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(2-pyridinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

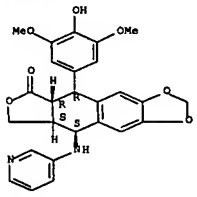
Absolute stereochemistry. Rotation (-).



RN 127882-76-2 HCAPLUS

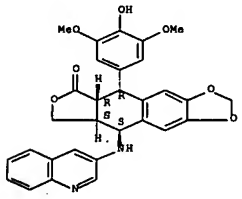
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-pyridinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



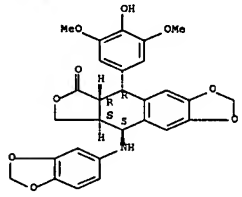
RN 127882-77-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-quinolinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



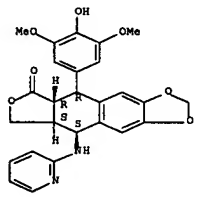
IT 127882-68-2 127882-75-1 127882-76-2
127882-77-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of antitumor agents)
RN 127882-68-2 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(1,3-benzodioxol-5-ylamino)-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



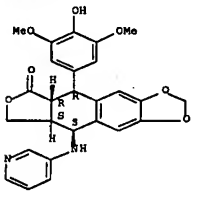
RN 127882-75-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(2-pyridinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



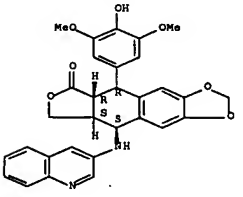
RN 127882-76-2 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-pyridinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 127882-77-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-quinolinylamino)-, (5R,5aR,8aS,9S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

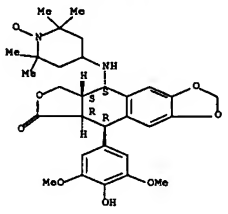


L9 ANSWER 39 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:23646 HCAPLUS Full-text
DOCUMENT NUMBER: 114:23646
TITLE: Study on anticancer drugs - new spin-labeled derivatives of podophyllotoxin
AUTHOR(S): Chen, Yaozu; Wang, Yanguang; Li, Jingxin; Tian, Xuan; Chen, Ping
CORPORATE SOURCE: Dep. Chem., Lanzhou Univ., Lanzhou, 730000, Peop. Rep. China
SOURCE: Chinese Science Bulletin (1990), 35(2), 99-102
CODEN: CSBUEF; ISSN: 1001-6538
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. I (R = β-H, R1 = H, OH; R = α-H, R1 = OH) and II were prepared I (R = β-H, R1 = OH) and II show significant antitumor activity.
IT 125670-69-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antitumor activity of)
RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.

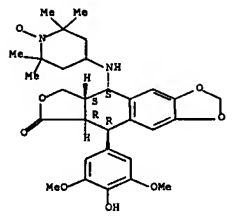


L9 ANSWER 40 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1991:17231 HCAPLUS Full-text
DOCUMENT NUMBER: 114:17231
TITLE: Antitumor activity of 4-(4''-(2'',2'',6'',6''-tetramethyl-1''-piperidinyloxy)amino)-4'-demethyl epipodophyllotoxin in vitro
AUTHOR(S): Jia, Zhengping; Zhang, Peiyan; Liang, Zhongdong; Wang, Yanguang; Chen, Yaozu; Li, Jinxin; Tiang, Xuan
CORPORATE SOURCE: Dep: Pharmacol., Lanzhou Med. Coll., Lanzhou, 730000, Peop. Rep. China
SOURCE: Zhongguo Yaoli Xuebao (1990), 11(6), 549-53
CODEN: CYLPDN; ISSN: 0253-9756
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The antitumor activity of a new podophyllotoxin spin-labeled derivative, 4-(4''-(2'',2'',6'',6''-tetramethyl-1''-piperidinyloxy)amino)-4'- demethylepipodophyllotoxin (GP-7) was studied in vitro. The proliferation of SGC-7901 cells was markedly inhibited by GP-7 depending on the concentration and exposure time. At concns. of 0.04-100 mg/L, the inhibition rates were 15.5-92.6%, with an ID50 of 0.42 mg/L. After exposure to GP-7 at >0.5 mg/L for 24, 48, 72 and 96 h, the inhibition rates were 25.1, 49.0, 71.4 and 84.9%, resp. The dose-response curve of GP-7 on SGC-7901 cell proliferation was similar to that of etoposide (VP-16). The colony formation of SGC-7901 cell was also inhibited by GP-7 in a concentration dependent fashion with an ID50 of 1.63 mg/L. At concns. of 0.1-0.5 mg/L, the inhibitory effects were stronger than that of VP-16. GP-7 decreased the mitotic index (MI) of SGC-7901 cell and had no effect on microtubule assembly and disassembly in vitro, which suggested that GP-7 did not act on M phase.
IT 125670-69-1, GP 7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

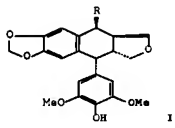
(Uses)
(antitumor activity of, as podophyllotoxin derivative, mitotic index and microtubule assembly and disassembly response to)

RN 125670-69-1 HCAPLUS
CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 41 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:552131 HCAPLUS Full-text
DOCUMENT NUMBER: 113:152131
TITLE: Antitumor agents. 113. New 4β-arylamino derivatives of 4'-O-demethylepipodophyllotoxin and related compounds as potent inhibitors of human DNA topoisomerase II
AUTHOR(S): Wang, Zhe Qing; Kuo, Yao Haur; Schnur, Dora; Bowen, J. Phillip; Liu, Su Ying; Han, Fu Sheng; Chang, Jang Yang; Cheng, Yung Chi; Lee, Kuo Hsiung
CORPORATE SOURCE: Sch. Pharm., Univ. North Carolina, Chapel Hill, NC, 27599, USA
SOURCE: Journal of Medicinal Chemistry (1990), 33(9), 2660-6
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 113:152131
GI



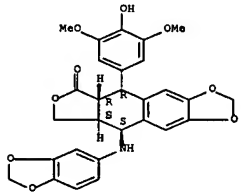
I

AB 4'-O-Demethylepipodophyllotoxin derivs. I [R = (un)substituted NHPh, pyridylamino, OC6H4F-4, OC6H4OH-4, SC6H4OH-4] were synthesized and evaluated for their inhibitory activity against the human DNA topoisomerase II as well as for their activity in causing cellular protein-linked DNA breakage. The results indicated, that for DNA toposomerase II, a 4β-anilino moiety is required for enhanced activity. I (R = 3- or 4-substituted NHPh) are as potent or more potent than etoposide, but I (R = NHC6H4CO2Et-2, NHC6H4OH-2) were inactive. I (R = aryloxy, arylthio) are much less active. I (R = pyridylamino) are as active or slightly more active than etoposide. There is a lack of correlation between the ability of these compds. in inhibiting DNA topoisomerase II and in causing protein-linked DNA breaks.

IT 127882-68-2P 127882-69-3P 127882-75-1P
127882-76-2P 127882-77-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antitumor activity of)

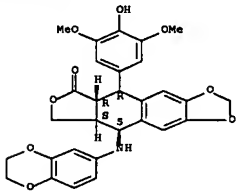
RN 127882-68-2 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-(1,3-benzodioxol-5-ylamino)-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



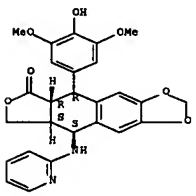
RN 127882-69-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 9-[(2,3-dihydro-1,4-benzodioxin-6-yl)amino]-5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



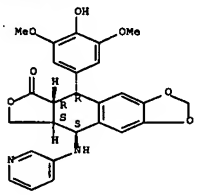
RN 127882-75-1 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(2-pyridinylamino)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



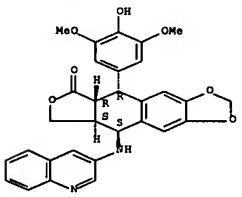
RN 127882-76-2 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-pyridinylamino)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

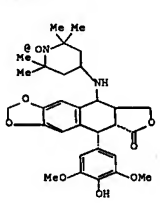


RN 127882-77-3 HCAPLUS
CN Furo[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-6(5aH)-one, 5,8,8a,9-tetrahydro-5-(4-hydroxy-3,5-dimethoxyphenyl)-9-(3-quinolinylamino)-, (5R,5aR,8aS,9S)- (9CI) (CA INDEX NAME)

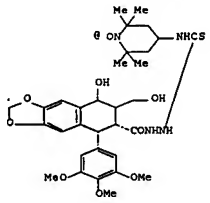
Absolute stereochemistry. Rotation (-).



L9 ANSWER 42 OF 42 HCAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1990:111618 HCAPLUS Full-text
DOCUMENT NUMBER: 112:111618
TITLE: Anticancer drugs. II. Synthesis and biological evaluation of spin-labeled derivatives of podophyllotoxin
AUTHOR(S): Chen, Yaozu; Wang, Yangguang; Li, Jimxin; Tian, Xuan; Jia, Zhenpin; Zhang, Peiyan
CORPORATE SOURCE: Dep. Chem., Lanzhou Univ., Lanzhou, 730001, Peop. Rep. China
SOURCE: Life Sciences (1989), 45(26), 2569-75
CODEN: LIFSAK; ISSN: 0024-3205
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I



II

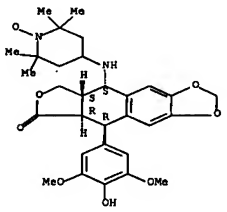
AB Spin-labeled derivs. of podophyllotoxin, I and II, were synthesized and tested for their anticancer activity against mouse solid tumors S180 and HepA in vivo and mouse lymphocytic leukemia L1210 and human stomach carcinoma SGC-7901 cells in vitro. At equitoxic concns., the anticancer activity of I was similar to that of the clin. used VP-16. The toxicity of I (LD50 231.2 mg/kg) was 3.3 times lower than that of VP-16 (LD50 69.5 mg/kg). I had low subchronic toxicity. The total chemical yield of I (26%) was 4 times higher than that of VP-16 (6%) (based on podophyllotoxin). Therefore, I seems to be a promising new entry into the podophyllotoxin class of anticancer drugs.

IT 125670-69-1P, GP 7
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and neoplasm-inhibitory activity and toxicity of)

RN 125670-69-1 HCAPLUS

CN 1-Piperidinyloxy, 4-[[(5S,5aS,8aR,9R)-5,5a,6,8,8a,9-hexahydro-9-(4-hydroxy-3,5-dimethoxyphenyl)-8-oxofuro[3',4':6,7]naphtho[2,3-d]-1,3-dioxol-5-yl]amino]-2,2,6,6-tetramethyl- (CA INDEX NAME)

Absolute stereochemistry.



=> log hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	231.74	408.90

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL

	ENTRY	SESSION
CA SUBSCRIBER PRICE	-32.76	-32.76

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 11:51:07 ON 06 JUN 2007